GenCore version 5.1.6

OM nucleic - nucleic search, using sw model

Run on: January 17, 2005, 12:56:43 ; Search time 2206.61 Seconds
(without alignments)
16548.056 Million cell updates/sec

Title: US-09-551-494-5
Perfect score: 6355
Sequence: 1 gatgttttaatagttttcga.....taaccgccggtagcggccca 6355

Scoring table: IDENTITY_NUC
Gapop 10.0 , Gapext 1.0

Searched: 4300275 seqs, 2872944193 residues

Total number of hits satisfying chosen parameters: 8600550

Minimum DB seq length: 0
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Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

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1	6355	100.0	6355	15	US-10-321-434-7	Sequence 7, Appli
2	2468	38.8	6395	10	US-09-962-527-1	Sequence 1, Appli
3	2468	38.8	6395	17	US-10-828-029-1	Sequence 1, Appli
4	2466.4	38.8	6395	15	US-10-338-592-2	Sequence 2, Appli
5	2455.4	38.6	6439	10	US-09-962-527-2	Sequence 2, Appli
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7	2452.2	38.6	6475	10	US-09-962-527-4	Sequence 4, Appli
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9	2449.8	38.5	6446	10	US-09-962-527-5	Sequence 5, Appli
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11	2431.2	38.3	6425	10	US-09-962-527-3	Sequence 3, Appli
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13	2291.4	36.1	11222	17	US-10-679-620-73	Sequence 73, Appl
14	2291.4	36.1	11641	9	US-09-993-059-33	Sequence 33, Appl
15	2291.4	36.1	11641	15	US-10-103-327-33	Sequence 33, Appl
16	2291.4	36.1	11641	16	US-10-684-300-13	Sequence 13, Appl
17	2291.4	36.1	11641	16	US-10-684-349-13	Sequence 13, Appl
18	2291.4	36.1	11641	18	US-10-851-388-33	Sequence 33, Appl
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27	2286.6	36.0	7685	9	US-09-949-317-22	Sequence 22, Appl
28	2286.6	36.0	7685	9	US-09-949-317-25	Sequence 25, Appl
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42	2286.6	36.0	10132	9	US-09-978-199-3	Sequence 3, Appli
43	2285	36.0	7926	14	US-10-119-330-1	Sequence 1, Appli
44	2285	36.0	7926	16	US-10-632-240-1	Sequence 1, Appli
45	2285	36.0	10607	15	US-10-098-155-1	Sequence 1, Appli

ALIGNMENTS

RESULT 1
US-10-321-434-7
; Sequence 7, Application US/10321434
; Publication No. US20030135882A1
; GENERAL INFORMATION:
; APPLICANT: Metzlaff, Michael
; APPLICANT: Meulewater, Frank
; APPLICANT: Gossel,, Veronique
; APPLICANT: Fach, Ina
; TITLE OF INVENTION: Improved methods and means for delivering inhibitory RNA to plan
; TITLE OF INVENTION: applications thereof
; FILE REFERENCE: FKOMOD
; CURRENT APPLICATION NUMBER: US/10/321,434
; CURRENT FILING DATE: 2002-12-18
; NUMBER OF SEQ ID NOS: 18
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 7
; LENGTH: 6355
; TYPE: DNA
; ORGANISM: Artificial
; FEATURE:
; OTHER INFORMATION: cDNA sequence of the genome of TMV-U2
US-10-321-434-7

Query Match 100.0%; Score 6355; DB 15; Length 6355;
Best Local Similarity 100.0%; Pred. No. 0;
Matches 6355; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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Qy      3421 TGCAGTGTTCAAAGGTCATAATCTCTTTGTGGCAACACCTAAATCAGGAGACTTTCCAGA 3480
Db      3421 TGCAGTGTTCAAAGGTCATAATCTCTTTGTGGCAACACCTAAATCAGGAGACTTTCCAGA 3480
Qy      3481 TCTACAGTTCTATTACGATGTATGCCTCCCTGGTAATAGTACTATACTTAACAAGTATGA 3540
Db      3481 TCTACAGTTCTATTACGATGTATGCCTCCCTGGTAATAGTACTATACTTAACAAGTATGA 3540
Qy      3541 TGCTGTTACCATGAGGTTACGTGATAATAGTCTTAATGTGAAGGATTGTGTTCTTGATTT 3600
Db      3541 TGCTGTTACCATGAGGTTACGTGATAATAGTCTTAATGTGAAGGATTGTGTTCTTGATTT 3600
Qy      3601 TTCCAAAAGTATTCCGATGCCAAAGGAGGTGAAACCATGTCTAGAGCCAGTTTTGCGTAC 3660
Db      3601 TTCCAAAAGTATTCCGATGCCAAAGGAGGTGAAACCATGTCTAGAGCCAGTTTTGCGTAC 3660
Qy      3661 CGCGGCGGAACCGCCAAGGGCTGCAGGACTACTCGAAAATCTGGTTGCAATGATTAAAAG 3720
Db      3661 CGCGGCGGAACCGCCAAGGGCTGCAGGACTACTCGAAAATCTGGTTGCAATGATTAAAAG 3720
Qy      3721 AAATTTCAACGCACCAGACCTGACGGGGACGATTGACATTGAGAGCACCGCATCTGTTGT 3780
Db      3721 AAATTTCAACGCACCAGACCTGACGGGGACGATTGACATTGAGAGCACCGCATCTGTTGT 3780
Qy      3781 AGTAGATAAGTTTTTTGATAGCTATTTTATTAAAAAAGAAAAATACACAAAAAATATTGC 3840
Db      3781 AGTAGATAAGTTTTTTGATAGCTATTTTATTAAAAAAGAAAAATACACAAAAAATATTGC 3840
Qy      3841 TGGAGTGATGACGAAGGATTCAATGATGAGATGGTTGGAAAACAGGAAAGAAGTACTATT 3900
Db      3841 TGGAGTGATGACGAAGGATTCAATGATGAGATGGTTGGAAAACAGGAAAGAAGTACTATT 3900
Qy      3901 GGACGACTTGGCTAACTACAATTTTACAGATCTGCCGGCCATCGATCAGTACAAGCACAT 3960
Db      3901 GGACGACTTGGCTAACTACAATTTTACAGATCTGCCGGCCATCGATCAGTACAAGCACAT 3960
Qy      3961 GATCAAGGCTCAACCAAAACAGAAATTGGACCTTTCAATTCAGAATGAATACCCTGCTCT 4020
Db      3961 GATCAAGGCTCAACCAAAACAGAAATTGGACCTTTCAATTCAGAATGAATACCCTGCTCT 4020
Qy      4021 GCAAACAATTGTCTACCATTCGAAGCAGATCAACGGTATTTTGGCCGGTTTCTCAGAGCT 4080
Db      4021 GCAAACAATTGTCTACCATTCGAAGCAGATCAACGGTATTTTGGCCGGTTTCTCAGAGCT 4080
Qy      4081 TACAAGGTTGCTGCTCGAGGCATTTGATTCTAAGAAGTTTCTTTTCTTTACTAGGAAAAC 4140
Db      4081 TACAAGGTTGCTGCTCGAGGCATTTGATTCTAAGAAGTTTCTTTTCTTTACTAGGAAAAC 4140
Qy      4141 TCCAGAACAGATTCAAGAATTTTTCTCGGATCTCGACTCGCACGTTCCTATGGATGTGTT 4200
Db      4141 TCCAGAACAGATTCAAGAATTTTTCTCGGATCTCGACTCGCACGTTCCTATGGATGTGTT 4200
Qy      4201 AGAACTGGATATTTCTAAGTATGATAAGTCACAGAACGAGTTTCATTGTGCTGTAGAGTA 4260
Db      4201 AGAACTGGATATTTCTAAGTATGATAAGTCACAGAACGAGTTTCATTGTGCTGTAGAGTA 4260
Qy      4261 TGAAATATGGAAAAGATTGGGTCTCAATGAGTTTTTGGCCGAAGTGTGGAAACAAGGGCA 4320
Db      4261 TGAAATATGGAAAAGATTGGGTCTCAATGAGTTTTTGGCCGAAGTGTGGAAACAAGGGCA 4320
Qy      4321 CAGGAAAACAACTTTGAAGGATTACATTGCTGGAATCAAGACATGTCTGTGGTATCAAAG 4380
Db      4321 CAGGAAAACAACTTTGAAGGATTACATTGCTGGAATCAAGACATGTCTGTGGTATCAAAG 4380
Qy      4381 GAAAAGCGGTGATGTGACTACTTTCATCGGCAATACTGTTATAATAGCAGCTTGCTTGGG 4440
Db      4381 GAAAAGCGGTGATGTGACTACTTTCATCGGCAATACTGTTATAATAGCAGCTTGCTTGGG 4440
Qy      4441 TTCAATGTTACCGATGGAAAAGGTCATAAAAGGTGCTTTTTGTGGAGACGATTCCGTTTT 4500
Db      4441 TTCAATGTTACCGATGGAAAAGGTCATAAAAGGTGCTTTTTGTGGAGACGATTCCGTTTT 4500
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Qy       4501 GTATTTTCCAAAGGGTTTGGATTTCCCTGACATTCAGTCATGTGCTAATCTCATGTGGAA 4560
             ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db       4501 GTATTTTCCAAAGGGTTTGGATTTCCCTGACATTCAGTCATGTGCTAATCTCATGTGGAA 4560

Qy       4561 TTTTGAGGCCAAACTGTATAGAAAGAGGTACGGTTACTTTTGTGGTAGATACATCATACA 4620
             ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db       4561 TTTTGAGGCCAAACTGTATAGAAAGAGGTACGGTTACTTTTGTGGTAGATACATCATACA 4620

Qy       4621 CCATGATAAGGGAGCAATAGTGTATTATGATCCTTTGAAGTTGATCTCCAAACTTGGGGC 4680
             ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db       4621 CCATGATAAGGGAGCAATAGTGTATTATGATCCTTTGAAGTTGATCTCCAAACTTGGGGC 4680

Qy       4681 AAAACATATCAAGGATTATGATCACTTAGAAGAGTTAAGGGTGTCTTTGTGCGATGTTGC 4740
             ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db       4681 AAAACATATCAAGGATTATGATCACTTAGAAGAGTTAAGGGTGTCTTTGTGCGATGTTGC 4740

Qy       4741 TTGTTCGCTCGGAAACTGGTGCTTAGGCTTTCCGCAGCTGAACGCAGCTATCAAGGAGGT 4800
             ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db       4741 TTGTTCGCTCGGAAACTGGTGCTTAGGCTTTCCGCAGCTGAACGCAGCTATCAAGGAGGT 4800

Qy       4801 TCATAAAACCGCGATTGATGGTTCGTTTGCTTTTAATTGTGTTAACAAATTTTTGTGTGA 4860
             ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db       4801 TCATAAAACCGCGATTGATGGTTCGTTTGCTTTTAATTGTGTTAACAAATTTTTGTGTGA 4860

Qy       4861 TAAATTTTTATTTAGAACTTTGTTTTTAAATGGCTGTTAGTCTCAGAGATACTGTCAAAA 4920
             ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db       4861 TAAATTTTTATTTAGAACTTTGTTTTTAAATGGCTGTTAGTCTCAGAGATACTGTCAAAA 4920

Qy       4921 TTAGCGAGTTCATTGATCTTTCGAAACAGGATGAGATACTTCCGGCATTCATGACTAAGG 4980
             ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db       4921 TTAGCGAGTTCATTGATCTTTCGAAACAGGATGAGATACTTCCGGCATTCATGACTAAGG 4980

Qy       4981 TCAAGAGTGTTAGAATATCGACTGTGGACAAGATTATGGCTGTTAAGAATGATAGTCTTT 5040
             ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db       4981 TCAAGAGTGTTAGAATATCGACTGTGGACAAGATTATGGCTGTTAAGAATGATAGTCTTT 5040

Qy       5041 CTGATGTAGATTTACTTAAAGGTGTTAAGTTAGTTAAGAAAGGGTATGTGTGCTTAGCTG 5100
             ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db       5041 CTGATGTAGATTTACTTAAAGGTGTTAAGTTAGTTAAGAAAGGGTATGTGTGCTTAGCTG 5100

Qy       5101 ATTTGGTAGTGTCTGGGGAGTGGAATCTCCCGGATAACTGCCGTGGTGGTGTCAGTGTTT 5160
             ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db       5101 ATTTGGTAGTGTCTGGGGAGTGGAATCTCCCGGATAACTGCCGTGGTGGTGTCAGTGTTT 5160

Qy       5161 GTATTGTAGATAAGAGAATGAAAAGGAGTAAGGAAGCAACGCTGGGTGCGTATCACGCCC 5220
             ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db       5161 GTATTGTAGATAAGAGAATGAAAAGGAGTAAGGAAGCAACGCTGGGTGCGTATCACGCCC 5220

Qy       5221 CTGCTTGCAAAAAGAATTTTTCTTTTAAGCTAATCCCTAATTATTCAATAACATCCGAGG 5280
             ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db       5221 CTGCTTGCAAAAAGAATTTTTCTTTTAAGCTAATCCCTAATTATTCAATAACATCCGAGG 5280

Qy       5281 ATGCTGAGAAGCACCCGTGGCAAGTGTTAGTGAATATCAAAGGAGTGGCTATGGAAGAAG 5340
             ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db       5281 ATGCTGAGAAGCACCCGTGGCAAGTGTTAGTGAATATCAAAGGAGTGGCTATGGAAGAAG 5340

Qy       5341 GATACTGTCCTTTATCTTTGGAGTTCGTTTCAATTTGTGTAGTACATAAAAATAATGTAA 5400
             ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db       5341 GATACTGTCCTTTATCTTTGGAGTTCGTTTCAATTTGTGTAGTACATAAAAATAATGTAA 5400

Qy       5401 GAAAAGGTTTGAGGGAACGTATTTTGAGTGTGACAGACGGCTCGCCAATTGAACTCACTG 5460
             ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db       5401 GAAAAGGTTTGAGGGAACGTATTTTGAGTGTGACAGACGGCTCGCCAATTGAACTCACTG 5460

Qy       5461 AAAAGGTTGTTGAGGAGTTCGTGGATGAAGTACCAATGGCTGTGAAACTCGAAAAGGTTC 5520
             ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db       5461 AAAAGGTTGTTGAGGAGTTCGTGGATGAAGTACCAATGGCTGTGAAACTCGAAAAGGTTC 5520

Qy       5521 CGGAAAACAAAAAAGAAATGGTAGGTAATAATGTTAATAATAAGAAAATAAATAACAGTG 5580
             ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db       5521 CGGAAAACAAAAAAGAAATGGTAGGTAATAATGTTAATAATAAGAAAATAAATAACAGTG 5580
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Qy       5581 GTAAGAAGGGTTTTAAAATTGAGGAAATTGAGGATAATGTAAGTGATGACGAGTCTATCG 5640
             ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db       5581 GTAAGAAGGGTTTTAAAATTGAGGAAATTGAGGATAATGTAAGTGATGACGAGTCTATCG 5640

Qy       5641 CGTCATCGAGTACGTTTTAATCAATATGCCTTATACAATCAACTCTCCGAGCCAATTTGT 5700
             ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db       5641 CGTCATCGAGTACGTTTTAATCAATATGCCTTATACAATCAACTCTCCGAGCCAATTTGT 5700

Qy       5701 TTACTTATCTTCCGCTTACGCAGATCCTGTGCAGCTGATCAATCTGTGTACAAATGCATT 5760
             ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db       5701 TTACTTATCTTCCGCTTACGCAGATCCTGTGCAGCTGATCAATCTGTGTACAAATGCATT 5760

Qy       5761 GGGTAACCAGTTTCAAACGCAACAAGCTAGGACAACAGTCCAACAGCAATTTGCGGATGC 5820
             ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
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Qy       5821 CTGGAAACCTGTGCCTAGTATGACAGTGAGATTTCCTGCATCGGATTTCTATGTGTATAG 5880
             ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db       5821 CTGGAAACCTGTGCCTAGTATGACAGTGAGATTTCCTGCATCGGATTTCTATGTGTATAG 5880

Qy       5881 ATATAATTCGACGCTTGATCCGTTGATCACGGCGTTATTAAATAGCTTTGATACTAGAAA 5940
             ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db       5881 ATATAATTCGACGCTTGATCCGTTGATCACGGCGTTATTAAATAGCTTTGATACTAGAAA 5940

Qy       5941 TAGAATAATAGAGGTTGATAATCAACCCGCACCGAATACTACTGAAATCGTTAACGCGAC 6000
             ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db       5941 TAGAATAATAGAGGTTGATAATCAACCCGCACCGAATACTACTGAAATCGTTAACGCGAC 6000

Qy       6001 TCAGAGGGTAGACGATGCTACTGTAGCTATAAGGGCTTCAATCAATAATTTGGCTAATGA 6060
             ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db       6001 TCAGAGGGTAGACGATGCTACTGTAGCTATAAGGGCTTCAATCAATAATTTGGCTAATGA 6060

Qy       6061 ACTGGTTCGTGGAACTGGCATGTTCAATCAAGCAGGCTTTGAGACTGCTAGTGGACTTGT 6120
             ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db       6061 ACTGGTTCGTGGAACTGGCATGTTCAATCAAGCAGGCTTTGAGACTGCTAGTGGACTTGT 6120

Qy       6121 CTGGACCACAACTCCGGCTACTTAGCTATTGTTGTGAGATTTCCTAAAATAAAGTCGCTG 6180
             ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db       6121 CTGGACCACAACTCCGGCTACTTAGCTATTGTTGTGAGATTTCCTAAAATAAAGTCGCTG 6180

Qy       6181 AAGACTTAAAATTCAGGGTGGCTGATACCAAAATCAGCAGTGGTTGTTCGTCCACTTAAA 6240
             ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db       6181 AAGACTTAAAATTCAGGGTGGCTGATACCAAAATCAGCAGTGGTTGTTCGTCCACTTAAA 6240

Qy       6241 TATAACGATTGTCATATCTGGATCCAACAGTTAAACCATGTGATGGTGTATACTGTGGTA 6300
             ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db       6241 TATAACGATTGTCATATCTGGATCCAACAGTTAAACCATGTGATGGTGTATACTGTGGTA 6300

Qy       6301 TGGCGTAAAACATCGGAGAGGTTCGAATCCTCCCCTAACCGCCGGTAGCGGCCCA 6355
             ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db       6301 TGGCGTAAAACATCGGAGAGGTTCGAATCCTCCCCTAACCGCCGGTAGCGGCCCA 6355
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RESULT 2
US-09-962-527-1
; Sequence 1, Application US/09962527
; Publication No. US20030049813A1
;   GENERAL INFORMATION:
;        APPLICANT: GARGER, STEPHEN
;                   HOLTZ, R. BARRY
;                   McCULLOCH, MICHAEL
;                   TURPEN, THOMAS
;        TITLE OF INVENTION: A PROCESS FOR ISOLATING AND
;                            PURIFYING VIRUSES SOLUBLE PROTEINS AND PEPTIDES
;                            FROM PLANT SOURCES
;        NUMBER OF SEQUENCES: 5
;        CORRESPONDENCE ADDRESS:
;             ADDRESSEE: Howrey & Simon
;             STREET: 1299 Pennsylvania Avenue N.W.
;             CITY: Washington
;             STATE: DC
;             COUNTRY: USA
;             ZIP: 20004
```

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;       COMPUTER READABLE FORM:
;            MEDIUM TYPE: Diskette
;            COMPUTER: IBM Compatible
;            OPERATING SYSTEM: DOS
;            SOFTWARE: FastSEQ for Windows Version 2.0
;       CURRENT APPLICATION DATA:
;            APPLICATION NUMBER: US/09/962,527
;            FILING DATE: 24-Sep-2001
;            CLASSIFICATION: <Unknown>
;       PRIOR APPLICATION DATA:
;            APPLICATION NUMBER: 09/037,751
;            FILING DATE: 10-march-1998
;       ATTORNEY/AGENT INFORMATION:
;            NAME: Halluin, Albert P
;            REGISTRATION NUMBER: 25,277
;            REFERENCE/DOCKET NUMBER: 00801.0140.999
;       TELECOMMUNICATION INFORMATION:
;            TELEPHONE: 650-463-8109
;            TELEFAX: 650-463-8400
;            TELEX: <Unknown>
;  INFORMATION FOR SEQ ID NO: 1:
;       SEQUENCE CHARACTERISTICS:
;            LENGTH: 6395 base pairs
;            TYPE: nucleic acid
;            STRANDEDNESS: single
;            TOPOLOGY: unknown
;       MOLECULE TYPE: Genomic RNA
;       SEQUENCE DESCRIPTION: SEQ ID NO: 1:
US-09-962-527-1

  Query Match             38.8%;  Score 2468;  DB 10;  Length 6395;
  Best Local Similarity   44.6%;  Pred. No. 0;
  Matches 2851;  Conservative 1173;  Mismatches 2300;  Indels   66;  Gaps   11;

Qy         20 ACAACAACAATTAAAACAAAAACAACATATTACAAACAACAAACAACAACAATGGCACAC 79
              || |  |  |  |||  | ||||||||:   |  || |  ||||  ||||:|||| ||
Db         18 ACCAACAACAACAAACAACAAACAACATTACAAATTACTAATTTACAAATTACAAATGGCAATAC 77

Qy         80 ATACAATCTATAATTAGCAACGCCCTTCTTGAAAGCGTGAGTGGTAAAAACACTCTCGTT 139
              | |||  |   |  |    ||  : |: || |  |:  | || || ||| |  : |:
Db         78 ACACAGACAGCUACCACAUCAGCUUUGCUGGACACUGUCCGAGGAAACAACUCCUUGGUC 137

Qy        140 AATGACCTTGCAAGAAGGCGCATGTACGATACGGCCGTGGAAGAATTTAACGCCCGCGAC 199
              ||:|| |: ||||   | ||  : :|||| || || |: ||||| :::|||||  || |||
Db        138 AAUGAUCUAGCAAAGCGUCGUCUUUACGACACAGCGGUUGAAGAGUUUAACGCUCGUGAC 197

Qy        200 CGTAGACCAAAGGTCAACTTTTCCAAAACTATTAGCGAAGAGCAAACGCTTCTAGTCTCC 259
              || || || ||||: |||:::::| |||   |: |||||  ||||| ||||:: : |   ||
Db        198 CGCAGGCCCAAGGUGAACUUUUCAAAAGUAAUAAGCGAGGAGCAGACGCUUAUUGCUACC 257

Qy        260 AACGCGTACCCGGAGTTCCAGATTACCTTTTATAATACTCAAAATGCCGTACACAGTTTG 319
                 |||:| || || ::||| |::|| ::::|:|| || |||||:|||||: ||     :
Db        258 CGGGCGUAUCCAGAAUUCCAAAUUACAUUUUAUAACACGCAAAAUGCCGUGCAUUCGCUU 317

Qy        320 GCTGGAGGTTTGAGAGCATTAGAATTGGAATATCTGATGCTACAAGTTCCCTATGGATCG 379
              || || || ::| || |  ::|||| :||||:|:|:||:|  : ||| ::|||:| |||:|
Db        318 GCAGGUGGAUUGCGAUCUUUAGAACUGGAAUAUCUGAUGAUGCAAAUUCCCUACGGAUCA 377

Qy        380 CCGACATATGATATAGGTGGGAACTTTGCAGCACATTTGTTCAAAGGCAGGGATTACGTG 439
                 ||| :|:|| |:||| ||||| :::||| | ||: :|::||| ||  |  |  :| |:
Db        378 UUGACUUAUGACAUAGGCGGGAAUUUUGCAUCGCAUCUGUUCAAGGGACGAGCAUAUGUA 437

Qy        440 CATTGCTGTATGCCCAATCTGGACATACGAGATATAATGAGGCACGAAGGACAAAAGGAC 499
              || :||:| |:|||||| |:|||| : ||||| |: |:| |||||||||| || || |||
Db        438 CACUGCUGCAUGCCCAACCUGGACGUUCGAGACAUCAUGCGGCACGAAGGCCAGAAAGAC 497

Qy        500 TCAATTGAGATGTATTTGTCCAGATTGTCTCGTTCTAACAAGGTAATTCCTGAGTTTCAA 559
                |::||  : :|  : :| ||  :      |        ||   | : ||  | :: |||
Db        498 AGUAUUGAACUAUACCUUUCUAGGCUAGAGAGAGGGGGGAAAACAGUCCCCAACUUCCAA 557

Qy        560 AGGGAGGCTTTTAACAGGTATGCAGAAGCTCCCAACGAAGTCTGCTGCTCTAAAACTTTT 619
              | ||| || ::: |||| :| ||||||  :||  | || |    |:|    || ||:::
Db        558 AAGGAAGCAUUUGACAGAUACGCAGAAAUUCCUGAAGACGCUGUCUGUCACAAUACUUUC 617

Qy        620 CAGGATTGTCGAATACATCCGCCAGAGAATAGTGGTAGAAGATACGCTGTTGCTCTGCAC 679
              |||      |||   || |||    || |     || |||   :| ||  ::|| |: |||
Db        618 CAGACAAUGCGACAUCAGCCGAUGCAGCAAUCAGGCAGAGUGUAUGCCAUUGCGCUACAC 677

Qy        680 AGTTTGTATGATATTCCTGTGCATGAGTTTGGAGCTGCGTTAATATCTAAGAATATACAT 739
              ||  : :|:|| |: || |   |:|||:: || || ||  :  :    || ||: : ||:
Db        678 AGCAUAUAUGACAUACCAGCCGAUGAGUUCGGGGCGGCACUCUUGAGGAAAAAUGUCCAU 737

Qy        740 GTATGTTATGCAGCTTCCATTTTGGCAGAAGCATTATTACTAGACCAGACGGAGGTTACG 799
                 :| :|:|| ||:: |   ::  | ||     :  : |: ||  |  |  | |: |
Db        738 ACGUGCUAUGCCGCUUUCCACUUCUCCGAGAACCUGCUUCUUGAAGAUUCAUACGUCAAU 797

Qy        800 CTTAATGAAATAGGCGCAACTTTCAAAAGAGAAGGTGATGATGTTTCTTTTTTCTTTGCT 859
               :  | ||||:   |||   :::     | || || ||  |  :  | :::: :::||
Db        798 UUGGACGAAAUCAACGCGUGUUUUUCGCGCGAUGGAGACAAGUUGACCUUUUCUUUUGCA 857

Qy        860 GATGAAAGTACTTTAAATTATAGTCATAAATACAAAAATATCTTGCATTATGTAGTTAAA 919
                 || ||:||: : ||::|: |:||:|  :|    ||:|:  :  | :|:|:    |||
Db        858 UCAGAGAGUACUCUUAAUUAUUGUCAUAGUUAUUCUAAUAUUCUUAAGUAUGUGUGCAAA 917

Qy        920 TCTTACTTTCCTGCTTCTAGTAGAATAGTTTACTTTAAGGAATTTTTAGTCACTAGGGTT 979
                |::||:: || || :|:| :|||   |:::|| : ||||| :::::||:||| || |::
Db        918 ACUUACUUCCCGGCCUCUAAUAGAGAGGUUUACAUGAAGGAGUUUUUAGUCACCAGAGUU 977

Qy        980 AATACTTGGTTTTGTAAATTTACCAAAGTAGATACCTATATTCTGTACAAGAGTGTTAGA 1039
              ||:|| :||::::|:|| ::: | | | :|||:|| : : :: :|:|||| |:|:
Db        978 AAUACCUGGUUUUGUAAGUUUUCUAGAAUAGAUACUUUUCUUUUGUACAAAGGUGUGGCC 1037

Qy       1040 CAAGTAGGGTGTGATAGTGATCAGTTCTATGAGGCGATGGAAGACGCCTTTGCTTACAAG 1099
              ||   | |    ||:||:|| |||:: :|:   || |:|||||||| :    ::||||
Db       1038 CAUAAAAGUGUAGAUAGUGAGCAGUUUUAUACUGCAAUGGAAGACGCAUGGCAUUACAAA 1097

Qy       1100 AAAACCTTGGCCATGTTCAACACTGAAAGAGCAATCTTTAGAGACACGGCTTCGGTTAAC 1159
              || ||  : || |:|: ||||| || |||    :| ::   ||  |  | :| |: ||
Db       1098 AAGACUCUUGCAAUGUGCAACAGCGAGAGAAUCCUCCUUGAGGAUUCAUCAUCAGUCAAU 1157

Qy       1160 TTTTGGTTCCCTAAGATGAAGGACATGGTGATAGTACCGCTGTTTGAGGGTTCTATTACC 1219
              :  :|:: || || |:|| ||| |:||: |: |:|||  : :: ||   ::|: :
Db       1158 UACUGGUUUCCCAAAAUGAGGGAUAUGGUCAUCGUACCAUUAUUCGACAUUUCUUUGGAG 1217

Qy       1220 AGCAAAAAGATGACAAGGAGTGAGGTCATTGTTAATCGTGACTTCGTTTACACAGTGCTT 1279
              |  |  |||| ||| | |  || |:| : |:       || ::||: :  ||||:||::
Db       1218 ACUAGUAAGAGGACGCGCAAGGAAGUCUUAGUGUCCAAGGAUUUCGUGUUUACAGUGCUU 1277

Qy       1280 AATCATATCAGAACATATCAAGCCAAAGCGTTAACTTACCAGAACGTATTATCTTTCGTG 1339
              || || |:  |||||:| || || |||||  : || :||   || |: :: :|  : |:
Db       1278 AACCACAUUCGAACAUACCAGGCGAAAGCUCUUACAUACGCAAAUGUUUUGUCCCUUGUC 1337

Qy       1340 GAGTCTATAAGATCCCGCGTGATAATCAATGGTGTTACTGCTAGGTCTGAATGGGATGTA 1399
              || :|  |:  ||:|  | |: |: |: || ||:|: || || |||:| ||||:||||:|:
Db       1338 GAAUCGAUUCGAUCGAGGGUAAUCAUUAACGGUGUGACAGCGAGGUCCGAAUGGGAUGUG 1397

Qy       1400 GATAAAGCAATTCTTCAACCCTTGTCAATGACTTTCTTCTTGCAGACTAAGCTGGCTGCG 1459
              || ||| |  :  : ||| ||::|:| |:||| :: : | :||| ||:|||| || |
Db       1398 GACAAAUCUUUGUUACAAUCCUUGUCCAUGACGUUUUACCUGCAUACUAAGCUUGCCGUU 1457

Qy       1460 CTTCAAGACGATATAGTAATGGGAAAGTTTCGGTGCTTGGATAAGACCACTTCTGAACTT 1519
              |:  | || ||  :| : |:  | |||::: |   |        || ||    :  | | :
Db       1458 CUAAAGGAUGACUUACUGAUUAGCAAGUUUAGUCUCGGUUCGAAAACGGUGUGCCAGCAU 1517

Qy       1520 ATTTGGGATGAGGTGGGCAAATTTTTTGGAAACGTTTTCCCCACTATCAAAGAGAGATTG 1579
              : :||||:||| :          :::|| |||| :: ||| |  : |||||||| :
Db       1518 GUGUGGGAUGAGAUUUCGCUGGCGUUUGGGAACGCAUUUCCCUCCGUGAAAGAGAGACUC 1577

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Qy       1640 TATGTCACATGGAAAGACAGGTTCGTAGCTGAATACACCAAGTCTGAGGAGTTACCGCAT 1699
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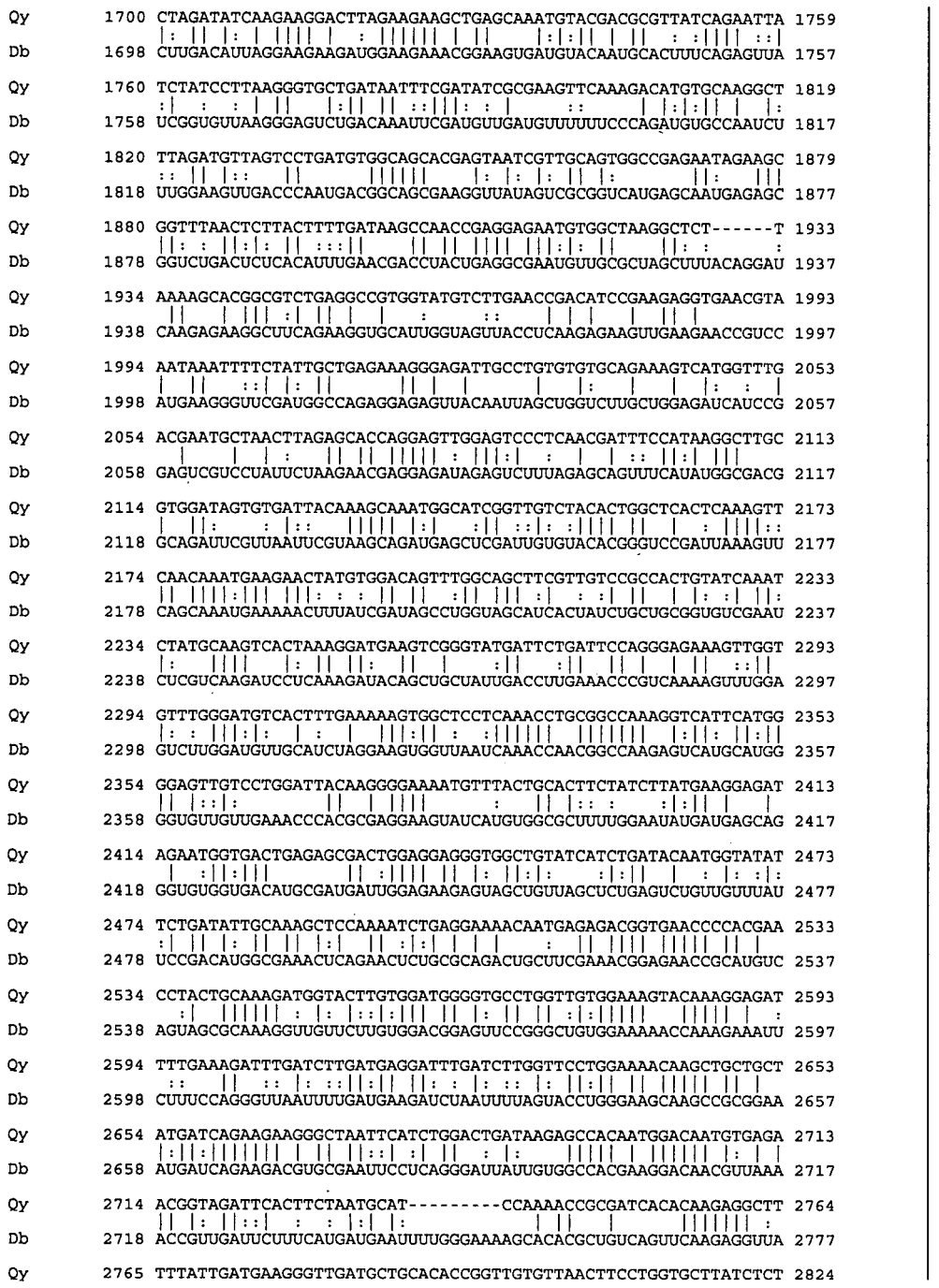
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Qy 1994 AATAAATTTTCTATTGCTGAGAAAGGGAGATTGCCTGTGTGTGCAGAAAGTCATGGTTTG 2053
Db 1998 AUGAAGGGUUCGAUGGCCAGAGGAGAGUUACAAUUAGCUGGUCUUGCUGGAGAUCAUCCG 2057
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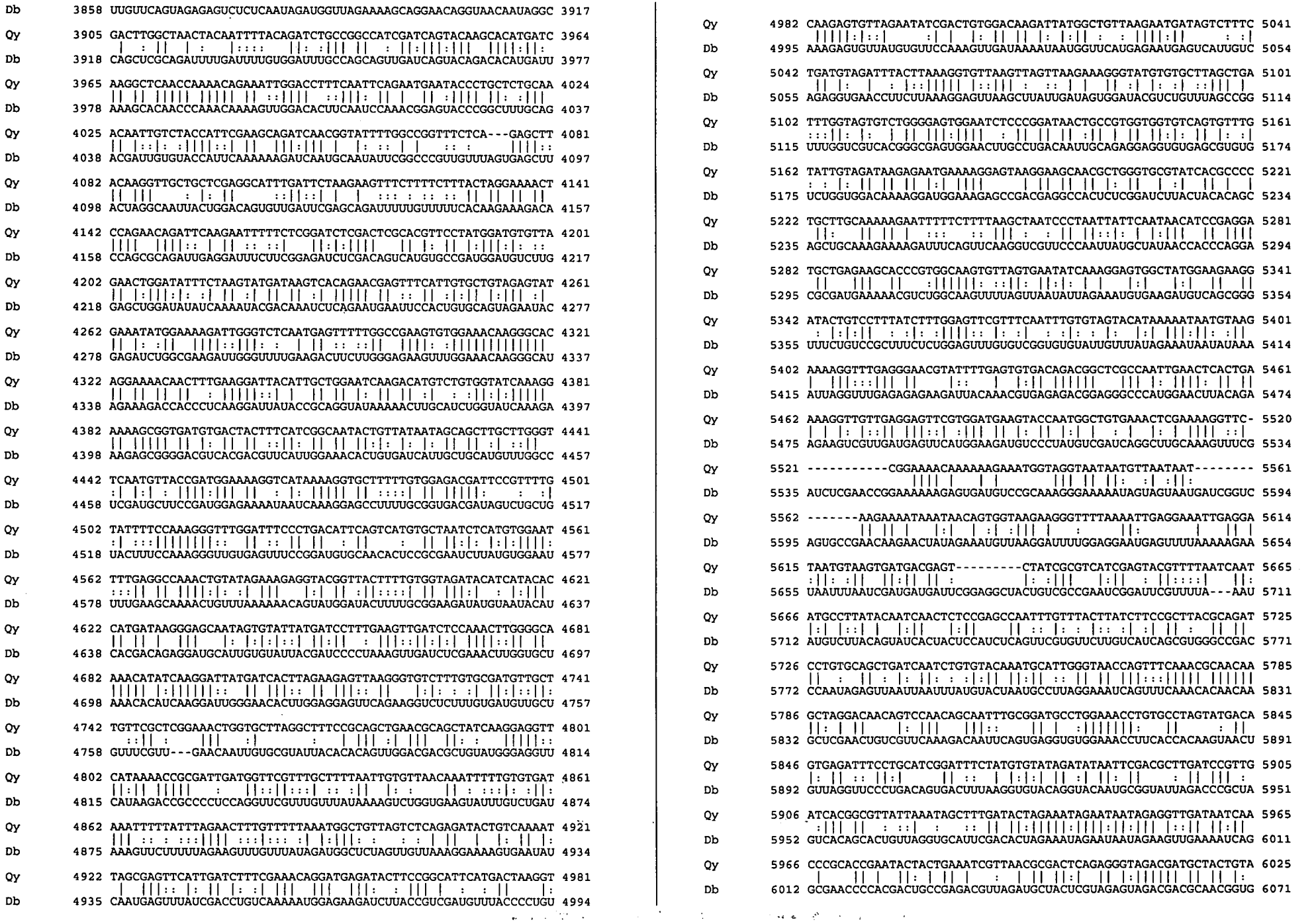

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RESULT 3
US-10-828-029-1
; Sequence 1, Application US/10828029
; Publication No. US20040171813A1
;   GENERAL INFORMATION:
;        APPLICANT: GARGER, STEPHEN
;                   HOLTZ, R. BARRY
;                   McCULLOCH, MICHAEL
;                   TURPEN, THOMAS
;        TITLE OF INVENTION: A PROCESS FOR ISOLATING AND
;                            PURIFYING VIRUSES SOLUBLE PROTEINS AND PEPTIDES
;                            FROM PLANT SOURCES
;        NUMBER OF SEQUENCES: 5
;        CORRESPONDENCE ADDRESS:
;             ADDRESSEE: Howrey & Simon
;             STREET: 1299 Pennsylvania Avenue N.W.
;             CITY: Washington
;             STATE: DC
;             COUNTRY: USA
;             ZIP: 20004
;        COMPUTER READABLE FORM:
;             MEDIUM TYPE: Diskette
;             COMPUTER: IBM Compatible
;             OPERATING SYSTEM: DOS
;             SOFTWARE: FastSEQ for Windows Version 2.0
;        CURRENT APPLICATION DATA:
;             APPLICATION NUMBER: US/10/828,029
;             FILING DATE: 20-Apr-2004
;             CLASSIFICATION: <Unknown>
;        PRIOR APPLICATION DATA:
;             APPLICATION NUMBER: US/09/962,527
;             FILING DATE: 24-Sep-2001
;             APPLICATION NUMBER: 09/037,751
;             FILING DATE: 10-march-1998
;        ATTORNEY/AGENT INFORMATION:
;             NAME: Halluin, Albert P
;             REGISTRATION NUMBER: 25,277
;             REFERENCE/DOCKET NUMBER: 00801.0140.999
;        TELECOMMUNICATION INFORMATION:
;             TELEPHONE: 650-463-8109
;             TELEFAX: 650-463-8400
;             TELEX: <Unknown>
;   INFORMATION FOR SEQ ID NO: 1:
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;             LENGTH: 6395 base pairs
;             TYPE: nucleic acid
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US-10-828-029-1

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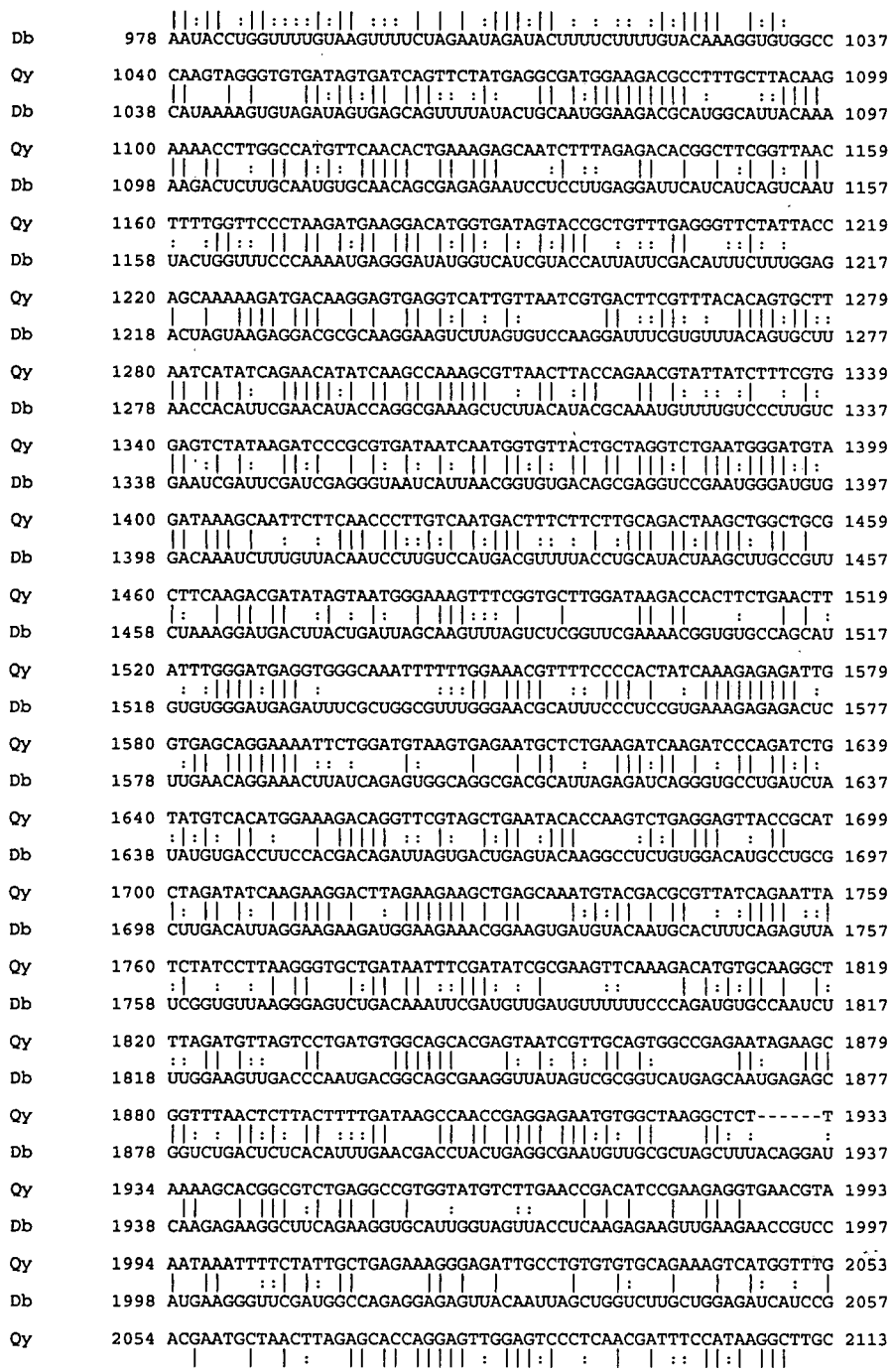
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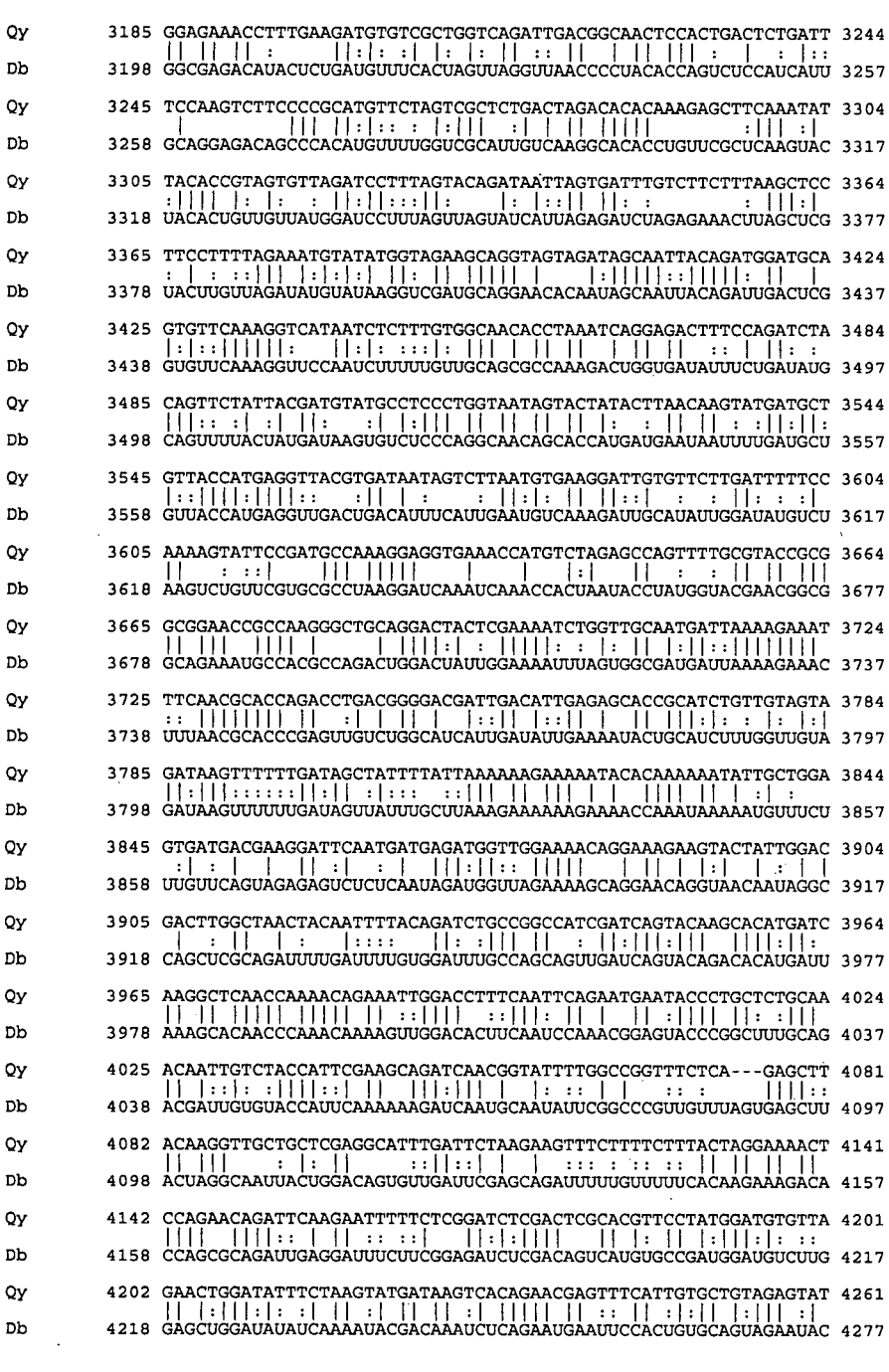
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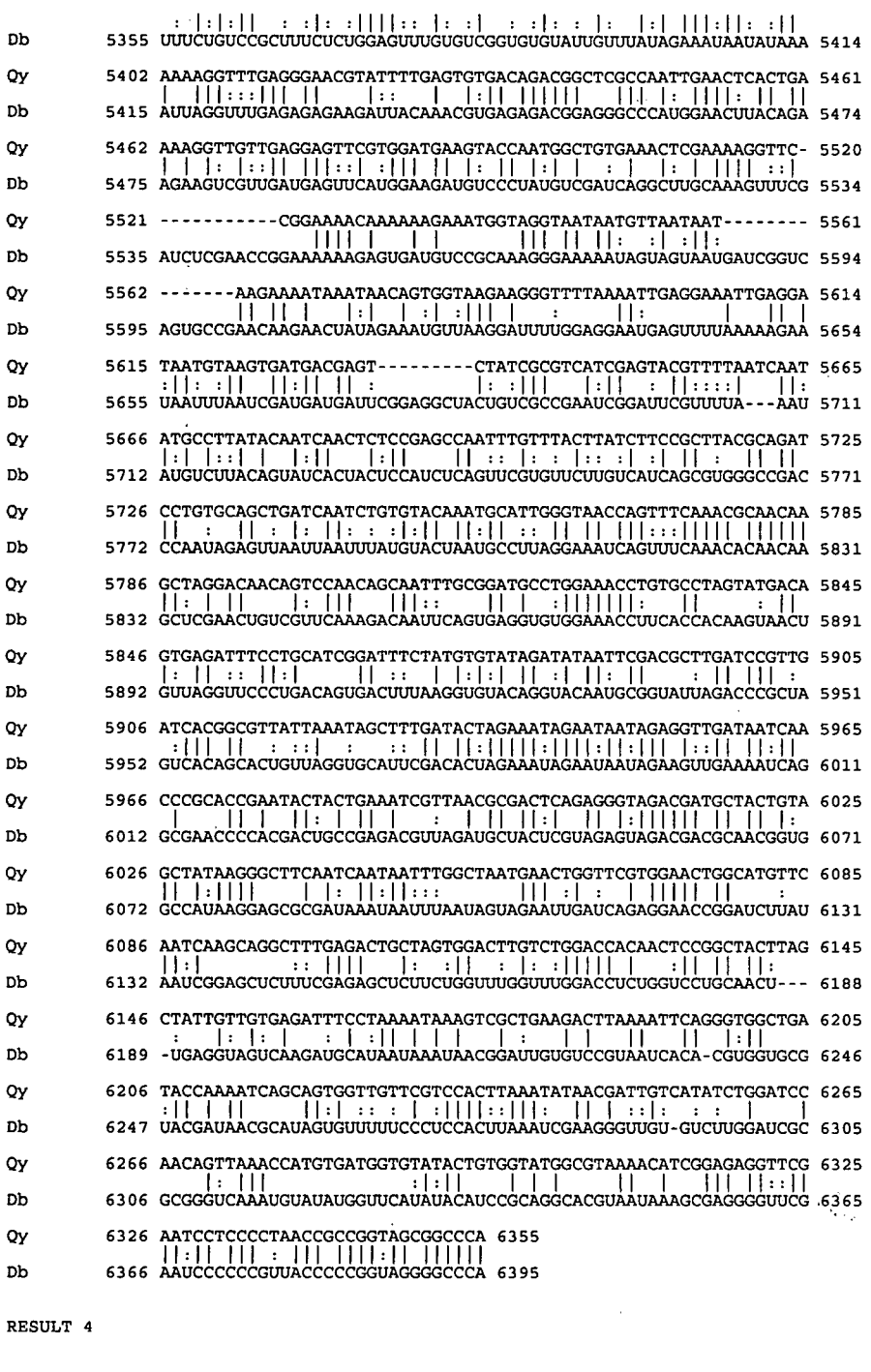

RESULT 4

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; Publication No. US20030208792A1
; GENERAL INFORMATION:
; APPLICANT: Fitchen, John H.
; APPLICANT: Beachy, Roger N.
; TITLE OF INVENTION: METHOD FOR USING TOBACCO MOSAIC VIRUS TO
; TITLE OF INVENTION: OVERPRODUCE PEPTIDES AND PROTEINS
; FILE REFERENCE: TSRI 312.1C1
; CURRENT APPLICATION NUMBER: US/10/338,592
; CURRENT FILING DATE: 2003-01-07
; PRIOR APPLICATION NUMBER: US 09/401,415
; PRIOR FILING DATE: 1999-09-21
; PRIOR APPLICATION NUMBER: US 08/687,559
; PRIOR FILING DATE: 1996-11-18
; PRIOR APPLICATION NUMBER: PCT/US95/01467
; PRIOR FILING DATE: 1995-02-03
; PRIOR APPLICATION NUMBER: US 08/192,477
; PRIOR FILING DATE: 1994-02-03
; NUMBER OF SEQ ID NOS: 32
; SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 2
; LENGTH: 6395
; TYPE: DNA
; ORGANISM: Tobacco mosaic virus
US-10-338-592-2

Query Match 38.8%; Score 2466.4; DB 15; Length 6395;
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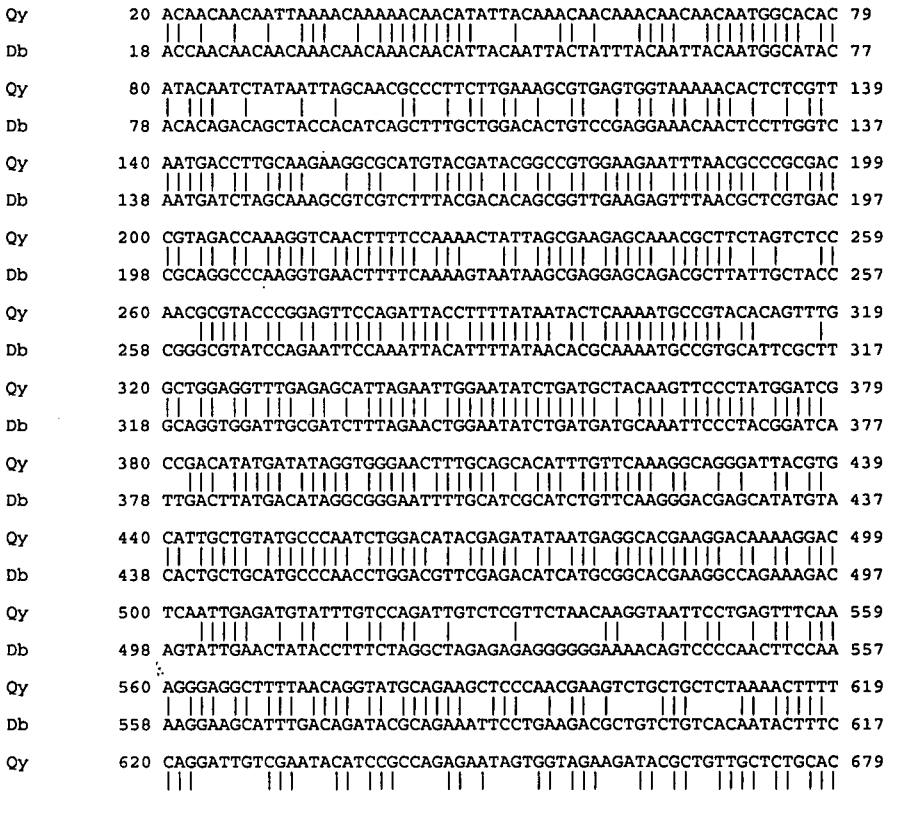

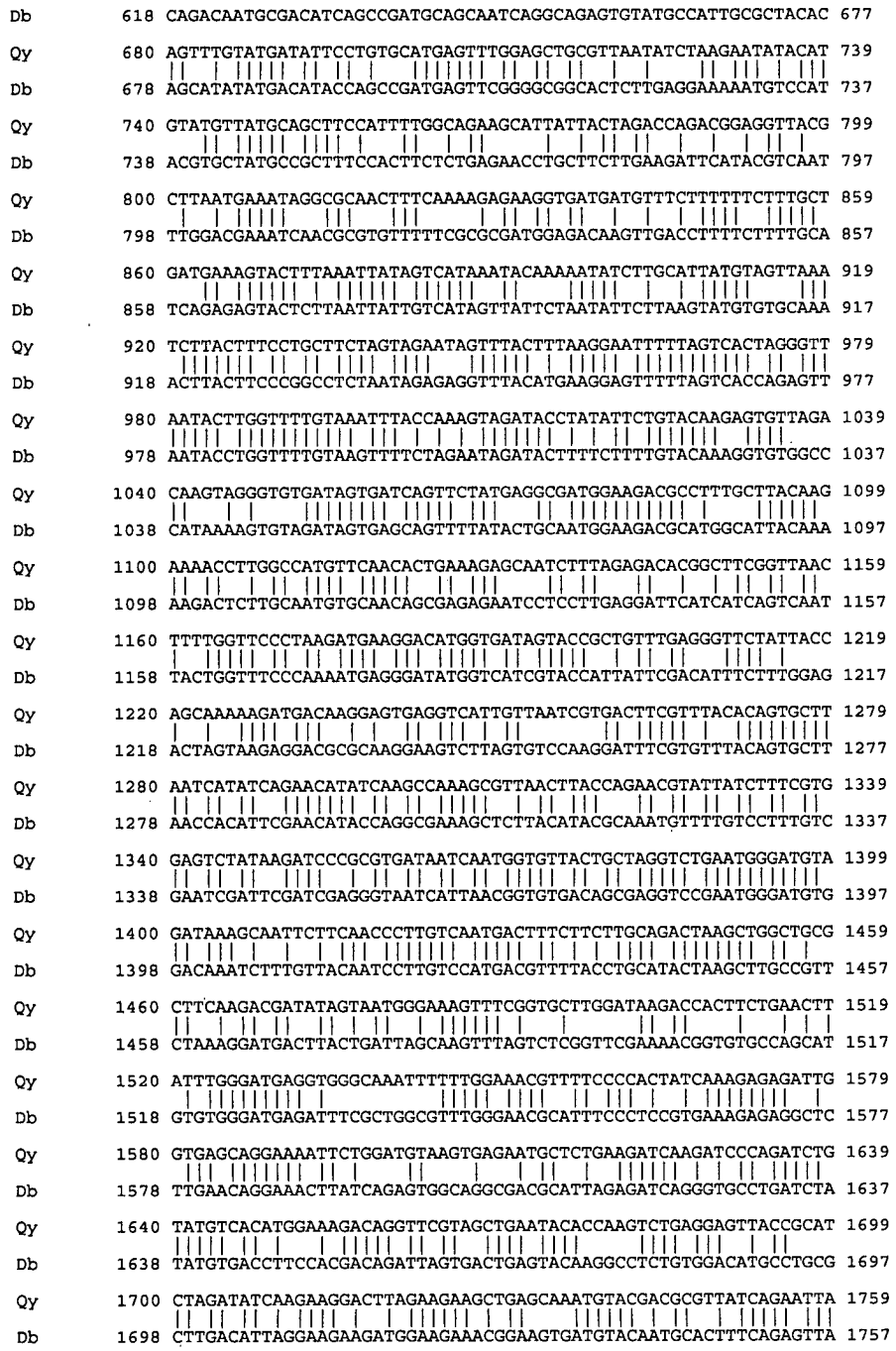
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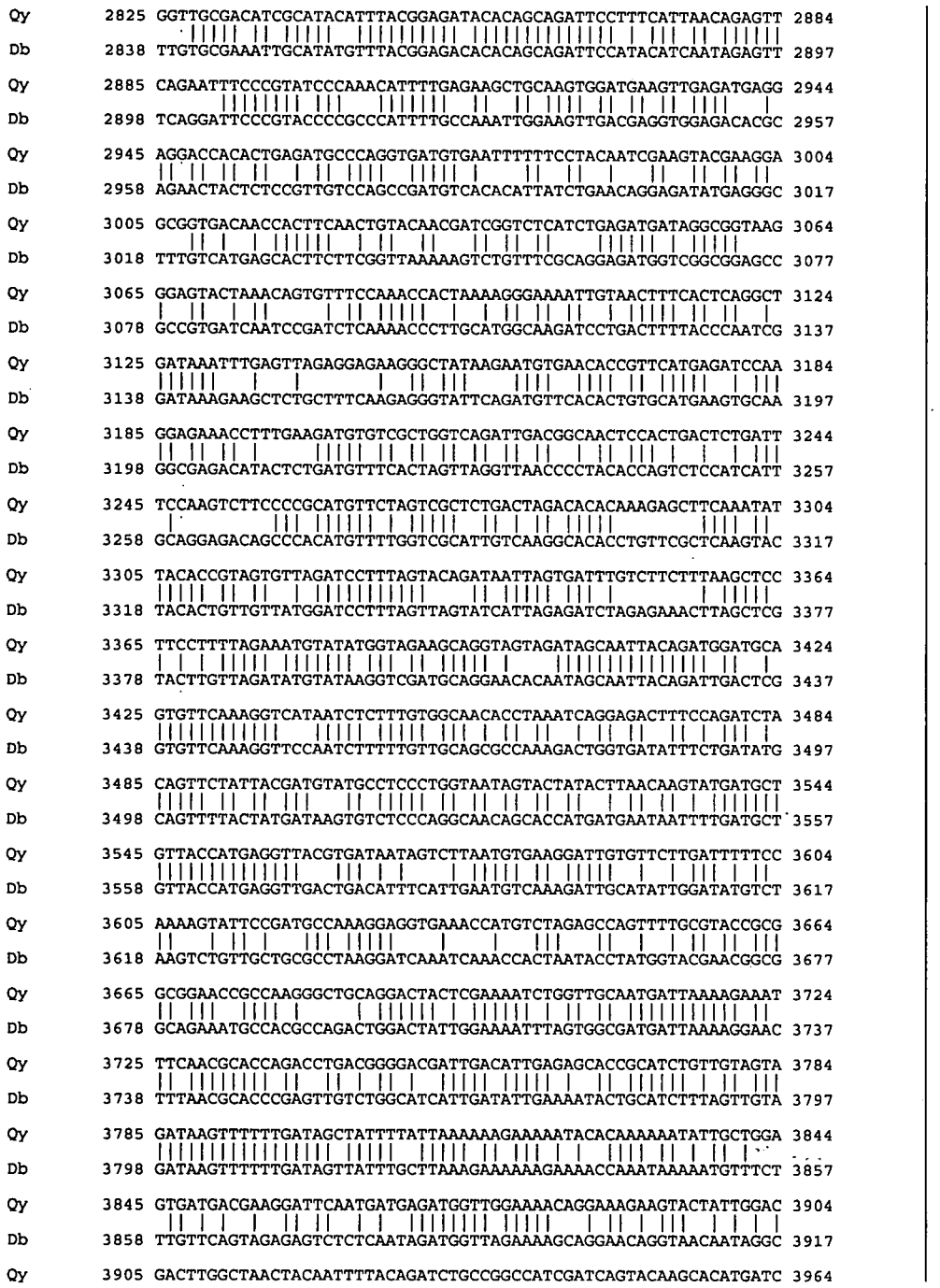
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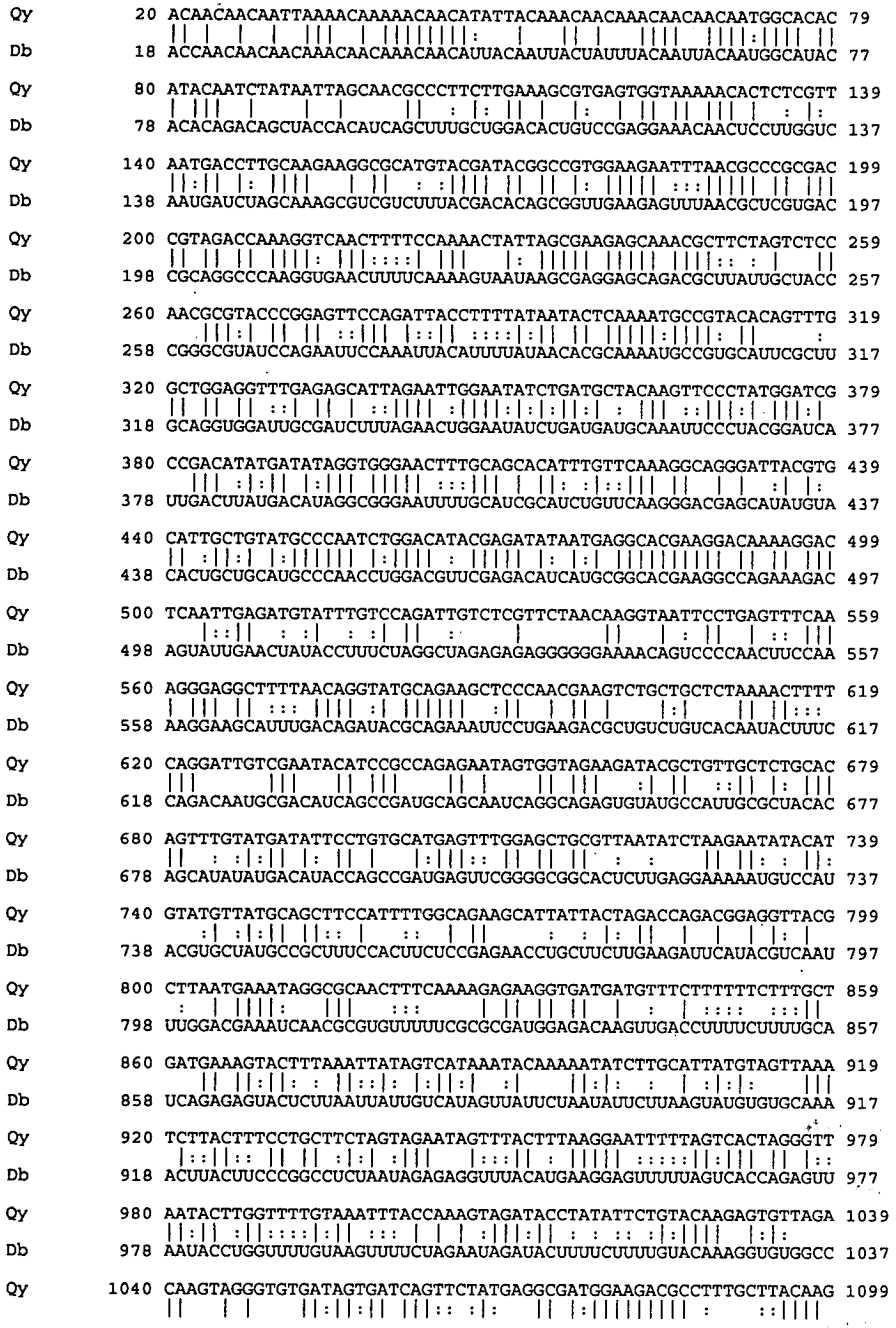
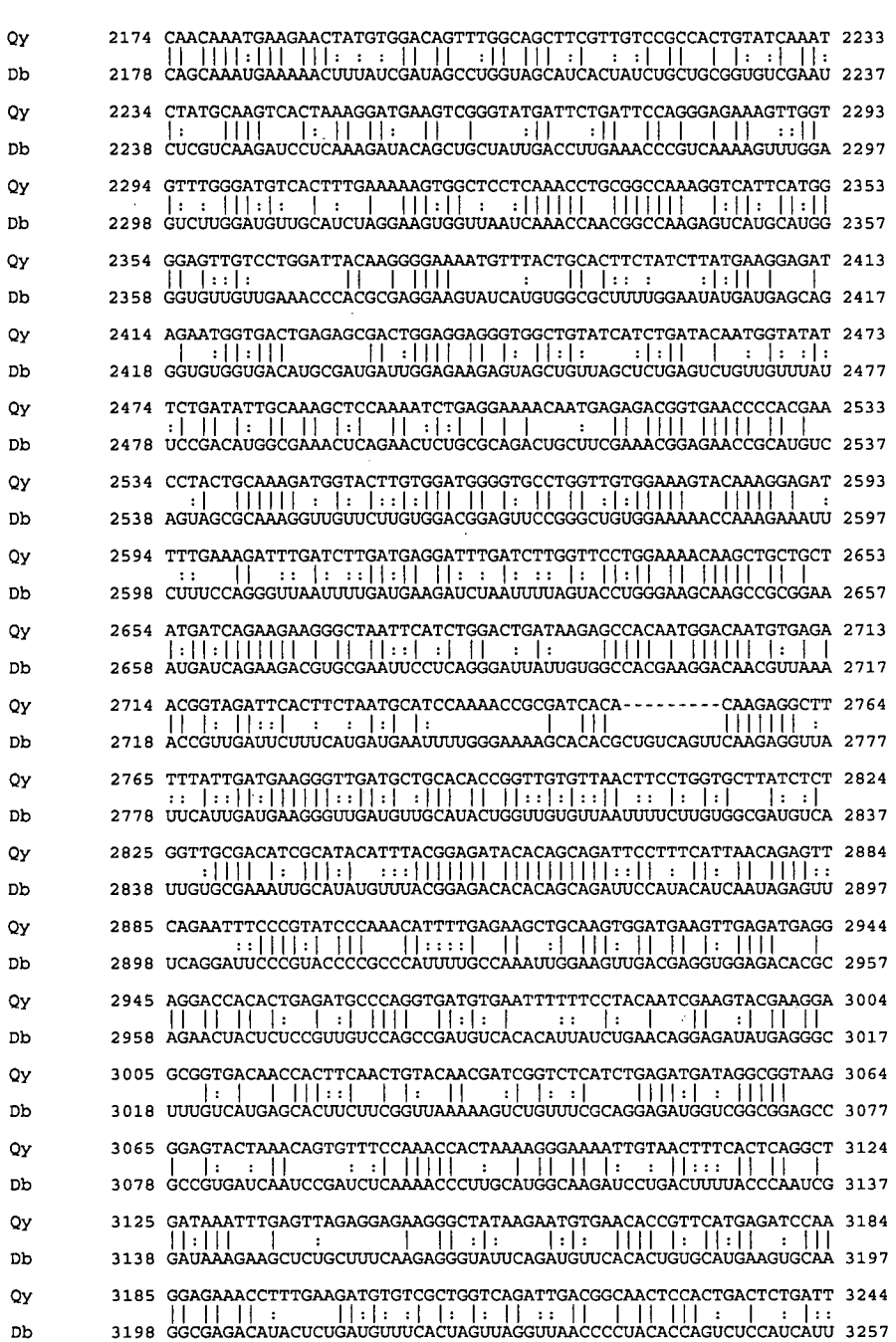
; Publication No. US20030049813A1
; GENERAL INFORMATION:
; APPLICANT: GARGER, STEPHEN
; HOLTZ, R. BARRY
; McCULLOCH, MICHAEL
; TURPEN, THOMAS
; TITLE OF INVENTION: A PROCESS FOR ISOLATING AND
; PURIFYING VIRUSES SOLUBLE PROTEINS AND PEPTIDES
; FROM PLANT SOURCES
; NUMBER OF SEQUENCES: 5
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Howrey & Simon
; STREET: 1299 Pennsylvania Avenue N.W.
; CITY: Washington
; STATE: DC
; COUNTRY: USA
; ZIP: 20004
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Diskette
; COMPUTER: IBM Compatible
; OPERATING SYSTEM: DOS
; SOFTWARE: FastSEQ for Windows Version 2.0
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/962,527
; FILING DATE: 24-Sep-2001
; CLASSIFICATION: <Unknown>
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 09/037,751
; FILING DATE: 10-march-1998
; ATTORNEY/AGENT INFORMATION:
; NAME: Halluin, Albert P
; REGISTRATION NUMBER: 25,277
; REFERENCE/DOCKET NUMBER: 00801.0140.999
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 650-463-8109
; TELEFAX: 650-463-8400
; TELEX: <Unknown>
; INFORMATION FOR SEQ ID NO: 2:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 6439 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: unknown
; MOLECULE TYPE: Genomic RNA
; SEQUENCE DESCRIPTION: SEQ ID NO: 2:
US-09-962-527-2

Query Match 38.6%; Score 2455.4; DB 10; Length 6439;

Best Local Similarity 44.8%; Pred. No. 0;
Matches 2772; Conservative 1147; Mismatches 2206; Indels 60; Gaps 8;

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Db       5175 UCUGGUGGACAAAAGGAUGGAAAGAGCCGACGAGGCCACUCUCGGAUCUUACUACACAGC 5234

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Qy       5282 TGCTGAGAAGCACCCGTGGCAAGTGTTAGTGAATATCAAAGGAGTGGCTATGGAAGAAGG 5341

Db       5295 CGCGAUGAAAAACGUCUGGCAAGUUUUAGUUAAUAUUAGAAAUGUGAAGAUGUCAGCGGG 5354

Qy       5342 ATACTGTCCTTTATCTTTGGAGTTCGTTTCAATTTGTGTAGTACATAAAAATAATGTAAG 5401

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Qy       5462 AAAGGTTGTTGAGGAGTTCGTGGATGAAGTACCAATGGCTGTGAAACTCGAAAAGGTTCC 5521

Db       5475 AGAAGUCGUUGAUGAGUUCAUGGAAGAUGUCCCUAUGUCGAUCAGGCUUGCAAAGUUUCG 5534

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Qy       5562 -------AAGAAAATAAATAACAGTGGTAAGAAGGGTTTTAAAATTGAGGAAATTGAGGA 5614

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Db       6132 AAUCGGAGCUCUUUCGAGAGCUCUUCUGGUUUGGUUUGGACCUCUGGUCCUGCAACCUAG 6191

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RESULT 6
US-10-828-029-2
; Sequence 2, Application US/10828029
; Publication No. US20040171813A1
; GENERAL INFORMATION:
; APPLICANT: GARGER, STEPHEN
; HOLTZ, R. BARRY
; McCULLOCH, MICHAEL
; TURPEN, THOMAS
; TITLE OF INVENTION: A PROCESS FOR ISOLATING AND
; PURIFYING VIRUSES SOLUBLE PROTEINS AND PEPTIDES
; FROM PLANT SOURCES
; NUMBER OF SEQUENCES: 5
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Howrey & Simon
; STREET: 1299 Pennsylvania Avenue N.W.
; CITY: Washington
; STATE: DC

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;            COUNTRY: USA
;            ZIP: 20004
;       COMPUTER READABLE FORM:
;            MEDIUM TYPE: Diskette
;            COMPUTER: IBM Compatible
;            OPERATING SYSTEM: DOS
;            SOFTWARE: FastSEQ for Windows Version 2.0
;       CURRENT APPLICATION DATA:
;            APPLICATION NUMBER: US/10/828,029
;            FILING DATE: 20-Apr-2004
;            CLASSIFICATION: <Unknown>
;       PRIOR APPLICATION DATA:
;            APPLICATION NUMBER: US/09/962,527
;            FILING DATE: 24-Sep-2001
;            APPLICATION NUMBER: 09/037,751
;            FILING DATE: 10-march-1998
;       ATTORNEY/AGENT INFORMATION:
;            NAME: Halluin, Albert P
;            REGISTRATION NUMBER: 25,277
;            REFERENCE/DOCKET NUMBER: 00801.0140.999
;       TELECOMMUNICATION INFORMATION:
;            TELEPHONE: 650-463-8109
;            TELEFAX: 650-463-8400
;            TELEX: <Unknown>
;   INFORMATION FOR SEQ ID NO: 2:
;       SEQUENCE CHARACTERISTICS:
;            LENGTH: 6439 base pairs
;            TYPE: nucleic acid
;            STRANDEDNESS: single
;            TOPOLOGY: unknown
;       MOLECULE TYPE: Genomic RNA
;       SEQUENCE DESCRIPTION: SEQ ID NO: 2:
US-10-828-029-2

  Query Match             38.6%;  Score 2455.4;  DB 17;  Length 6439;
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  Matches 2772;  Conservative 1147;  Mismatches 2206;  Indels   60;  Gaps    8;

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Db         78 ACACAGACAGCUACCACAUCAGCUUUGCUGGACACUGUCCGAGGAAACAACUCCUUGGUC 137

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Qy        260 AACGCGTACCCGGAGTTCCAGATTACCTTTTATAATACTCAAAATGCCGTACACAGTTTG 319
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Qy        320 GCTGGAGGTTTGAGAGCATTAGAATTGGAATATCTGATGCTACAAGTTCCCTATGGATCG 379
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Db        318 GCAGGUGGAUUGCGAUCUUUAGAACUGGAAUAUCUGAUGAUGCAAAUUCCCUACGGAUCA 377

Qy        380 CCGACATATGATATAGGTGGGAACTTTGCAGCACATTTGTTCAAAGGCAGGGATTACGTG 439
                ||| :|:|| |:||| ||||| :::||| | ||: :|::||| ||  | |  :| |:
Db        378 UUGACUUAUGACAUAGGCGGGAAUUUUGCAUCGCAUCUGUUCAAGGGACGAGCAUAUGUA 437

Qy        440 CATTGCTGTATGCCCAATCTGGACATACGAGATATAATGAGGCACGAAGGACAAAAGGAC 499
              || :||:| |:|||||| |:|||| : ||||| |: |:| |||||||||| || || |||
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                |::||  : :|  : :| ||  :      |        ||    | : ||  | :: |||
Db        498 AGUAUUGAACUAUACCUUUCUAGGCUAGAGAGAGGGGGGAAAACAGUCCCCAACUUCCAA 557

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Db        558 AAGGAAGCAUUUGACAGAUACGCAGAAAUUCCUGAAGACGCUGUCUGUCACAAUACUUUC 617

Qy        620 CAGGATTGTCGAATACATCCGCCAGAGAATAGTGGTAGAAGATACGCTGTTGCTCTGCAC 679
              |||       |||   || |||    || |    || |||   :| ||  ::|| |: |||
Db        618 CAGACAAUGCGACAUCAGCCGAUGCAGCAAUCAGGCAGAGUGUAUGCCAUUGCGCUACAC 677

Qy        680 AGTTTGTATGATATTCCTGTGCATGAGTTTGGAGCTGCGTTAATATCTAAGAATATACAT 739
              ||  : :|:|| |: || |   |:|||:: || || ||  :  :    || ||: : ||:
Db        678 AGCAUAUAUGACAUACCAGCCGAUGAGUUCGGGGCGGCACUCUUGAGGAAAAAUGUCCAU 737

Qy        740 GTATGTTATGCAGCTTCCATTTTGGCAGAAGCATTATTACTAGACCAGACGGAGGTTACG 799
                :| :|:|| ||:: |  ::  | ||    :  : |: ||  |  |  | |: |
Db        738 ACGUGCUAUGCCGCUUUCCACUUCUCCGAGAACCUGCUUCUUGAAGAUUCAUACGUCAAU 797

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               :  | ||||:   |||   :::      | || || ||  |  :  | ::::  :::||
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Qy        860 GATGAAAGTACTTTAAATTATAGTCATAAATACAAAAATATCTTGCATTATGTAGTTAAA 919
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Db        858 UCAGAGAGUACUCUUAAUUAUUGUCAUAGUUAUUCUAAUAUUCUUAAGUAUGUGUGCAAA 917

Qy        920 TCTTACTTTCCTGCTTCTAGTAGAATAGTTTACTTTAAGGAATTTTTAGTCACTAGGGTT 979
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Db        918 ACUUACUUCCCGGCCUCUAAUAGAGAGGUUUACAUGAAGGAGUUUUUAGUCACCAGAGUU 977

Qy        980 AATACTTGGTTTTGTAAATTTACCAAAGTAGATACCTATATTCTGTACAAGAGTGTTAGA 1039
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Db        978 AAUACCUGGUUUUGUAAGUUUUCUAGAAUAGAUACUUUUCUUUUGUACAAAGGUGUGGCC 1037

Qy       1040 CAAGTAGGGTGTGATAGTGATCAGTTCTATGAGGCGATGGAAGACGCCTTTGCTTACAAG 1099
              ||   | |    ||:||:|| |||:: :|:   || |:||||||||| :    ::||||
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Db       1098 AAGACUCUUGCAAUGUGCAACAGCGAGAGAAUCCUCCUUGAGGAUUCAUCAUCAGUCAAU 1157

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Qy       1220 AGCAAAAAGATGACAAGGAGTGAGGTCATTGTTAATCGTGACTTCGTTTACACAGTGCTT 1279
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Db       1218 ACUAGUAAGAGGACGCGCAAGGAAGUCUUAGUGUCCAAGGAUUUCGUGUUUACAGUGCUU 1277

Qy       1280 AATCATATCAGAACATATCAAGCCAAAGCGTTAACTTACCAGAACGTATTATCTTTCGTG 1339
              || || |:  |||||:| || || |||||  : || :||   || |: :: :|  : |:
Db       1278 AACCACAUUCGAACAUACCAGGCGAAAGCUCUUACAUACGCAAAUGUUUUGUCCCUUGUC 1337

Qy       1340 GAGTCTATAAGATCCCGCGTGATAATCAATGGTGTTACTGCTAGGTCTGAATGGGATGTA 1399
              || :| |:  ||:|  | |: |: |: || ||:|: || || |||:| |||:|||||:|:
Db       1338 GAAUCGAUUCGAUCGAGGGUAAUCAUUAACGGUGUGACAGCGAGGUCCGAAUGGGAUGUG 1397

Qy       1400 GATAAAGCAATTCTTCAACCCTTGTCAATGACTTTCTTCTTGCAGACTAAGCTGGCTGCG 1459
              || ||| |  :  : ||| |||::|:| |:||| :: : | :||| |||:|||: || |
Db       1398 GACAAAUCUUUGUUACAAUCCUUGUCCAUGACGUUUUACCUGCAUACUAAGCUUGCCGUU 1457

Qy       1460 CTTCAAGACGATATAGTAATGGGAAAGTTTCGGTGCTTGGATAAGACCACTTCTGAACTT 1519
              |:  | || ||  :| : |:  | |||::: |   |        || ||    :  | | :
Db       1458 CUAAAGGAUGACUUACUGAUUAGCAAGUUUAGUCUCGGUUCGAAAACGGUGUGCCAGCAU 1517

Qy       1520 ATTTGGGATGAGGTGGGCAAATTTTTTGGAAACGTTTTCCCCACTATCAAAGAGAGATTG 1579
               : :||||:||| :          :::|| |||| :: ||| |  : |||||||| :
Db       1518 GUGUGGGAUGAGAUUUCGCUGGCGUUUGGGAACGCAUUUCCCUCCGUGAAAGAGAGACUC 1577

Qy       1580 GTGAGCAGGAAAATTCTGGATGTAAGTGAGAATGCTCTGAAGATCAAGATCCCAGATCTG 1639
               :|| ||||||| :: :   |:      |  | ||  :  |||:|| | : || ||:|:
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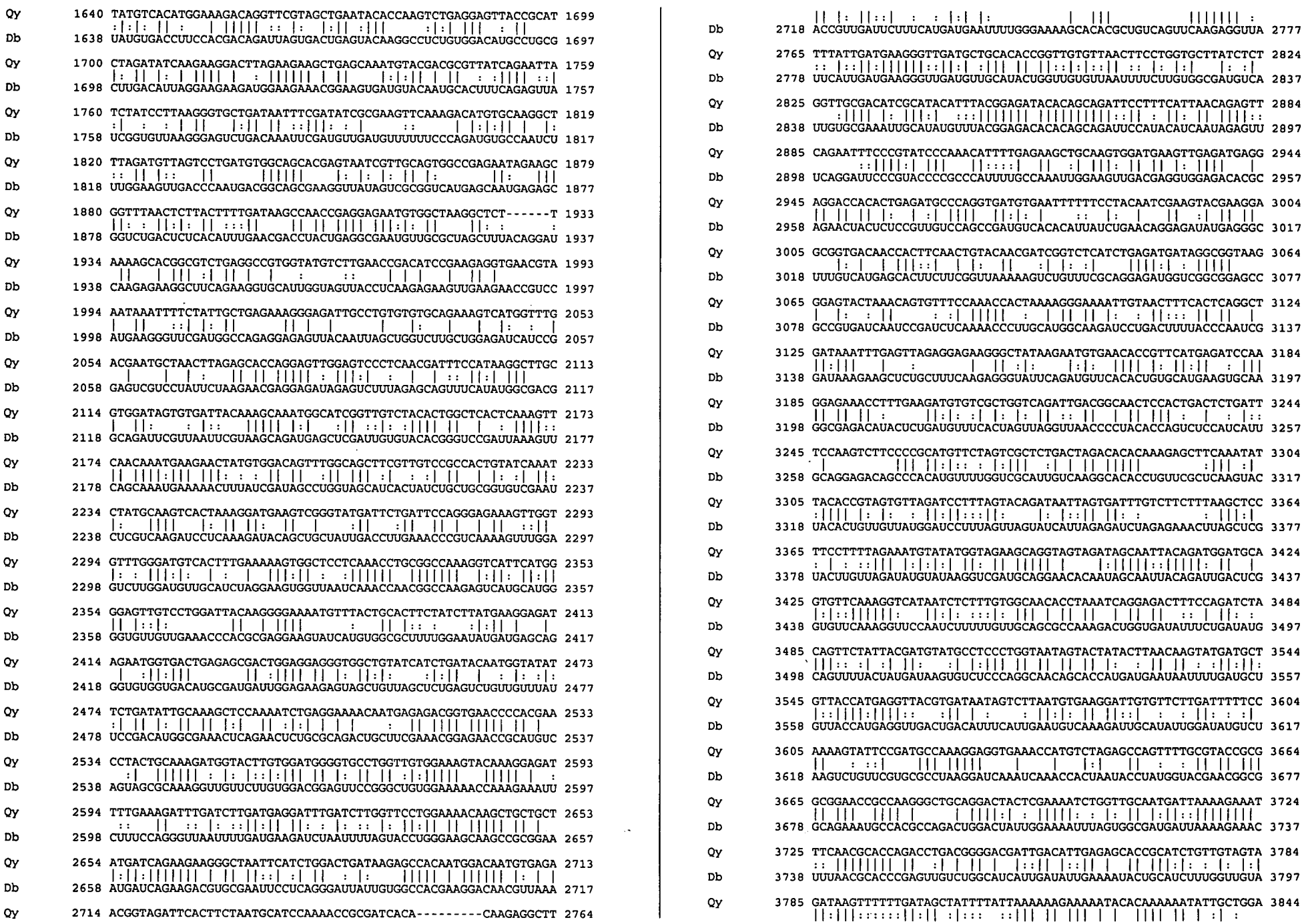

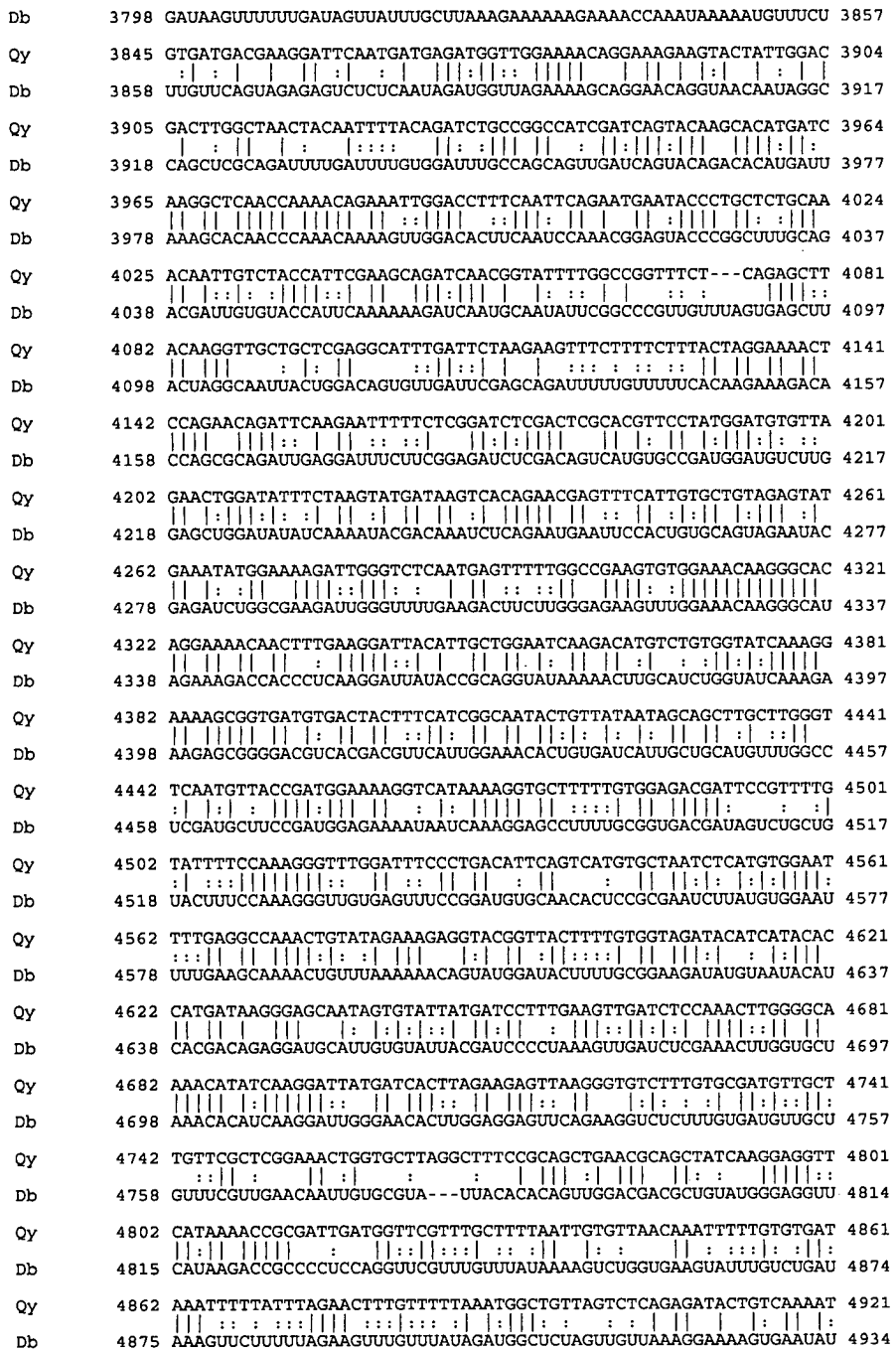

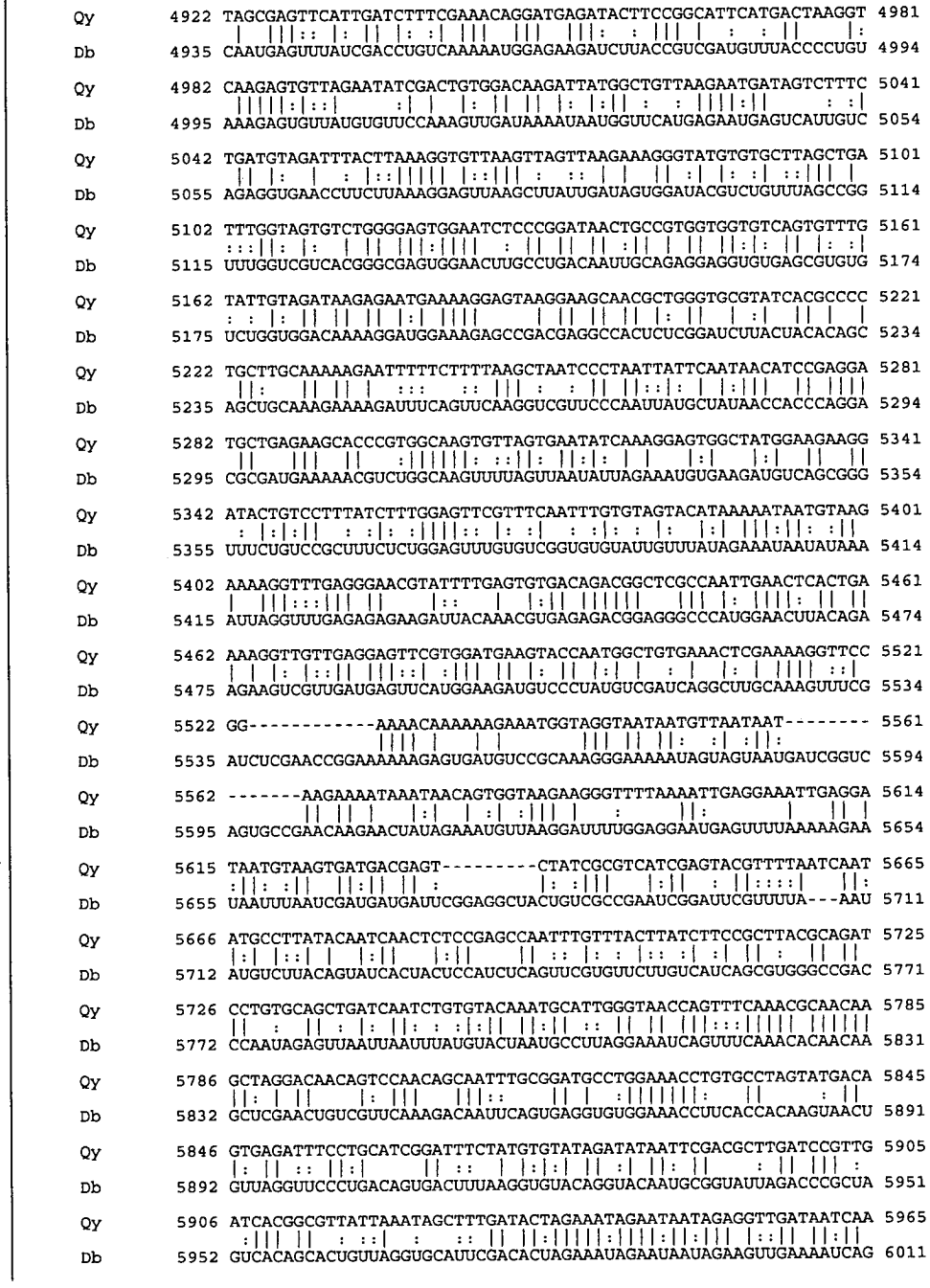

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Qy       6086 AATCAAGCAGGCTTTGAGACTGCTAGTGGACTTGTCTGGACCACAACTCCGGCTACTTAG 6145
Db       6132 AAUCGGAGCUCUUUCGAGAGCUCUUCUGGUUUGGUUUGGACCUCUGGUCCUGCAACCUAG 6191

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RESULT 7
US-09-962-527-4
; Sequence 4, Application US/09962527
; Publication No. US20030049813A1
;   GENERAL INFORMATION:
;        APPLICANT: GARGER, STEPHEN
;                   HOLTZ, R. BARRY
;                   McCULLOCH, MICHAEL
;                   TURPEN, THOMAS
;        TITLE OF INVENTION: A PROCESS FOR ISOLATING AND
;                            PURIFYING VIRUSES SOLUBLE PROTEINS AND PEPTIDES
;                            FROM PLANT SOURCES
;        NUMBER OF SEQUENCES: 5
;        CORRESPONDENCE ADDRESS:
;             ADDRESSEE: Howrey & Simon
;             STREET: 1299 Pennsylvania Avenue N.W.
;             CITY: Washington
;             STATE: DC
;             COUNTRY: USA
;             ZIP: 20004
;        COMPUTER READABLE FORM:
;             MEDIUM TYPE: Diskette
;             COMPUTER: IBM Compatible
;             OPERATING SYSTEM: DOS
;             SOFTWARE: FastSEQ for Windows Version 2.0
;        CURRENT APPLICATION DATA:
;             APPLICATION NUMBER: US/09/962,527
;             FILING DATE: 24-Sep-2001
;             CLASSIFICATION: <Unknown>
;        PRIOR APPLICATION DATA:
;             APPLICATION NUMBER: 09/037,751
;             FILING DATE: 10-march-1998
;        ATTORNEY/AGENT INFORMATION:
;             NAME: Halluin, Albert P
;             REGISTRATION NUMBER: 25,277
;             REFERENCE/DOCKET NUMBER: 00801.0140.999
;        TELECOMMUNICATION INFORMATION:
;             TELEPHONE: 650-463-8109
;             TELEFAX: 650-463-8400
;             TELEX: <Unknown>
;   INFORMATION FOR SEQ ID NO: 4:
;        SEQUENCE CHARACTERISTICS:
;             LENGTH: 6475 base pairs
;             TYPE: nucleic acid
;             STRANDEDNESS: single
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;        MOLECULE TYPE: Genomic RNA
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US-09-962-527-4

  Query Match           38.6%;  Score 2452.2;  DB 10;  Length 6475;
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Qy        260 AACGCGTACCCGGAGTTCCAGATTACCTTTTATAATACTCAAAATGCCGTACACAGTTTG 319
Db        258 CGGGCGUAUCCAGAAUUCCAAAUUACAUUUUAUAACACGCAAAAUGCCGUGCAUUCGCUU 317

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Qy        440 CATTGCTGTATGCCCAATCTGGACATACGAGATATAATGAGGCACGAAGGACAAAAGGAC 499
Db        438 CACUGCUGCAUGCCCAACCUGGACGUUCGAGACAUCAUGCGGCACGAAGGCCAGAAAGAC 497

Qy        500 TCAATTGAGATGTATTTGTCCAGATTGTCTCGTTCTAACAAGGTAATTCCTGAGTTTCAA 559
Db        498 AGUAUUGAACUAUACCUUUCUAGGCUAGAGAGAGGGGGGAAAACAGUCCCCAACUUCCAA 557

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Qy        680 AGTTTGTATGATATTCCTGTGCATGAGTTTGGAGCTGCGTTAATATCTAAGAATATACAT 739
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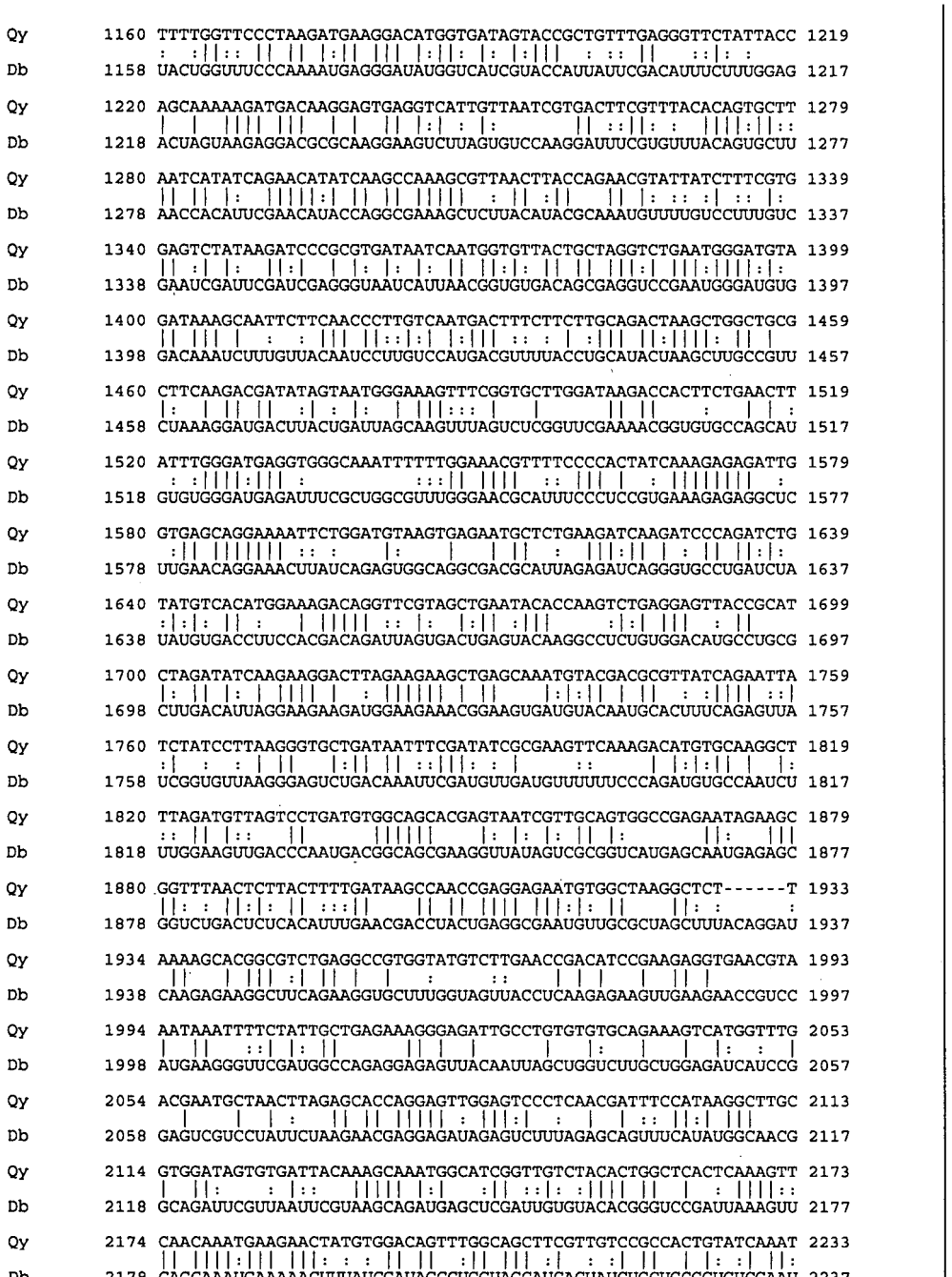
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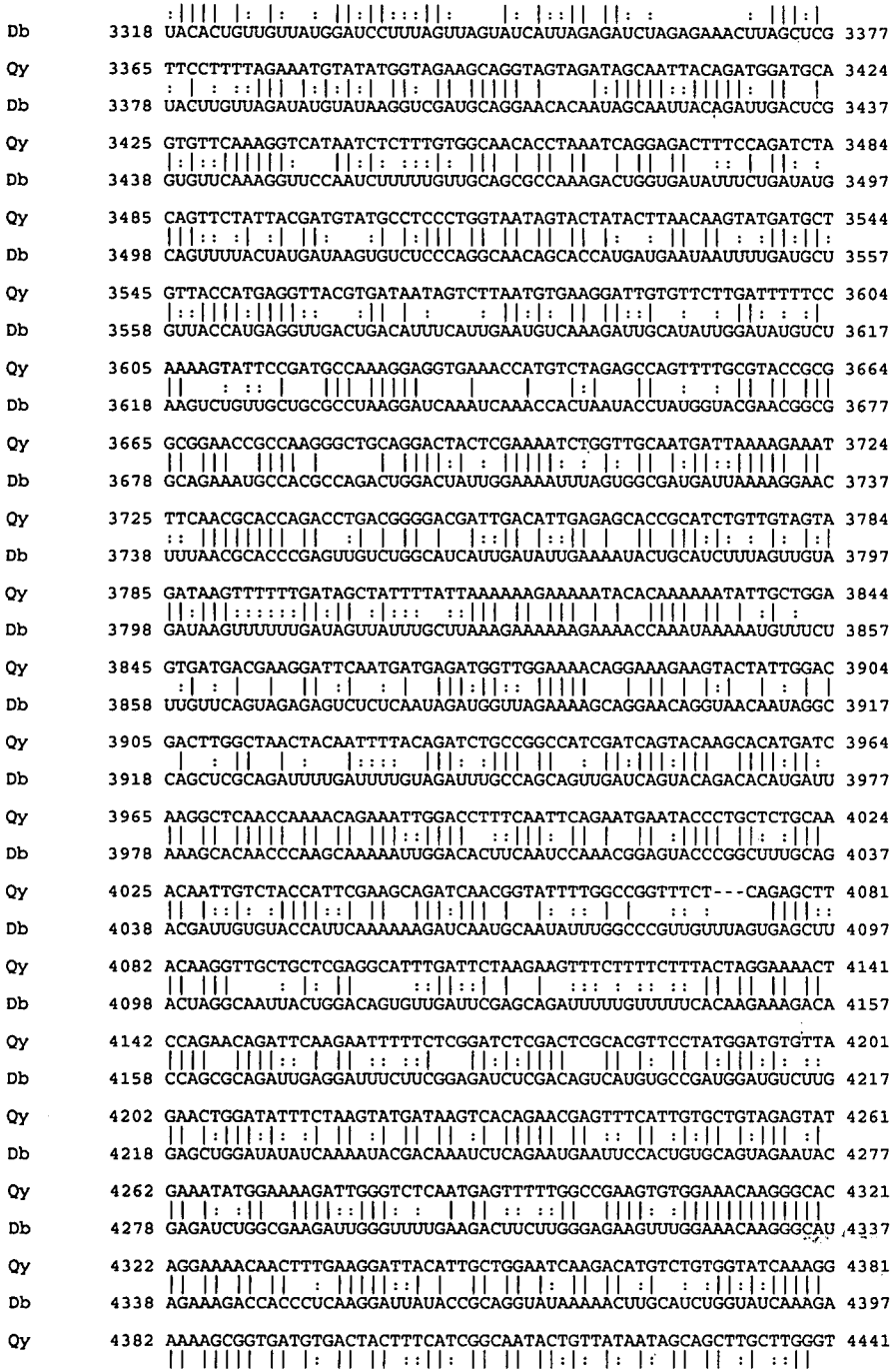
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;        APPLICANT: GARGER, STEPHEN
;                   HOLTZ, R. BARRY
;                   McCULLOCH, MICHAEL
;                   TURPEN, THOMAS
;        TITLE OF INVENTION: A PROCESS FOR ISOLATING AND
;                            PURIFYING VIRUSES SOLUBLE PROTEINS AND PEPTIDES
;                            FROM PLANT SOURCES
;        NUMBER OF SEQUENCES: 5
;        CORRESPONDENCE ADDRESS:
;             ADDRESSEE: Howrey & Simon
;             STREET: 1299 Pennsylvania Avenue N.W.
;             CITY: Washington
;             STATE: DC
;             COUNTRY: USA
;             ZIP: 20004
;        COMPUTER READABLE FORM:
;             MEDIUM TYPE: Diskette
;             COMPUTER: IBM Compatible
;             OPERATING SYSTEM: DOS
;             SOFTWARE: FastSEQ for Windows Version 2.0
;        CURRENT APPLICATION DATA:
;             APPLICATION NUMBER: US/10/828,029
;             FILING DATE: 20-Apr-2004
;             CLASSIFICATION: <Unknown>
;        PRIOR APPLICATION DATA:
;             APPLICATION NUMBER: US/09/962,527
;             FILING DATE: 24-Sep-2001
;             APPLICATION NUMBER: 09/037,751
;             FILING DATE: 10-march-1998
;        ATTORNEY/AGENT INFORMATION:
;             NAME: Halluin, Albert P
;             REGISTRATION NUMBER: 25,277
;             REFERENCE/DOCKET NUMBER: 00801.0140.999
;        TELECOMMUNICATION INFORMATION:
;             TELEPHONE: 650-463-8109
;             TELEFAX: 650-463-8400
;             TELEX: <Unknown>
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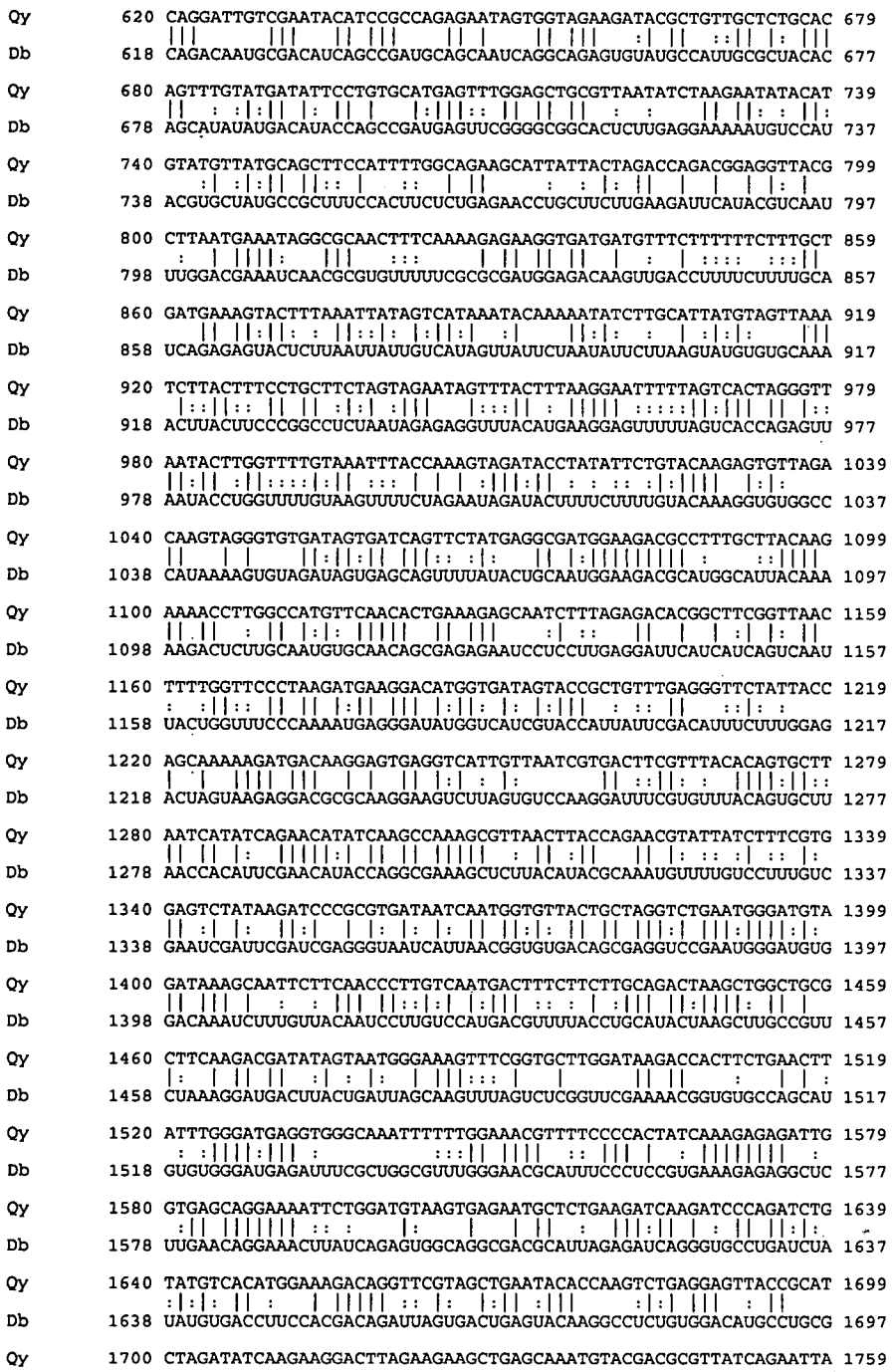
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; Publication No. US20030049813A1
; GENERAL INFORMATION:
; APPLICANT: GARGER, STEPHEN
; HOLTZ, R. BARRY
; McCULLOCH, MICHAEL
; TURPEN, THOMAS
; TITLE OF INVENTION: A PROCESS FOR ISOLATING AND
; PURIFYING VIRUSES SOLUBLE PROTEINS AND PEPTIDES
; FROM PLANT SOURCES
; NUMBER OF SEQUENCES: 5
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Howrey & Simon
; STREET: 1299 Pennsylvania Avenue N.W.
; CITY: Washington
; STATE: DC
; COUNTRY: USA
; ZIP: 20004
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Diskette
; COMPUTER: IBM Compatible
; OPERATING SYSTEM: DOS
; SOFTWARE: FastSEQ for Windows Version 2.0
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/962,527
; FILING DATE: 24-Sep-2001
; CLASSIFICATION: <Unknown>
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 09/037,751
; FILING DATE: 10-march-1998
; ATTORNEY/AGENT INFORMATION:
; NAME: Halluin, Albert P
; REGISTRATION NUMBER: 25,277
; REFERENCE/DOCKET NUMBER: 00801.0140.999
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 650-463-8109
; TELEFAX: 650-463-8400
; TELEX: <Unknown>
; INFORMATION FOR SEQ ID NO: 5:
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US-09-962-527-5

Query Match 38.5%; Score 2449.8; DB 10; Length 6446;
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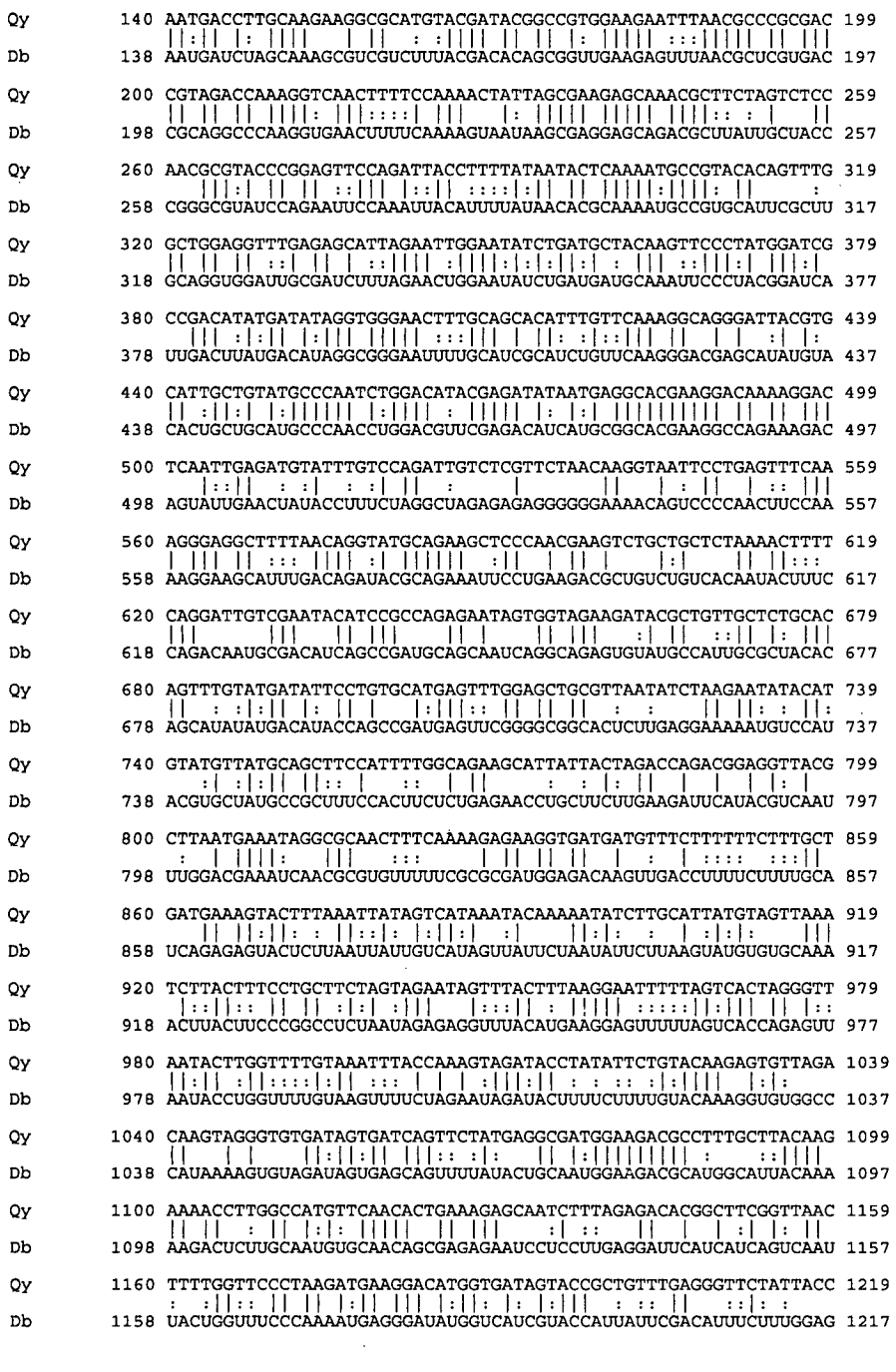
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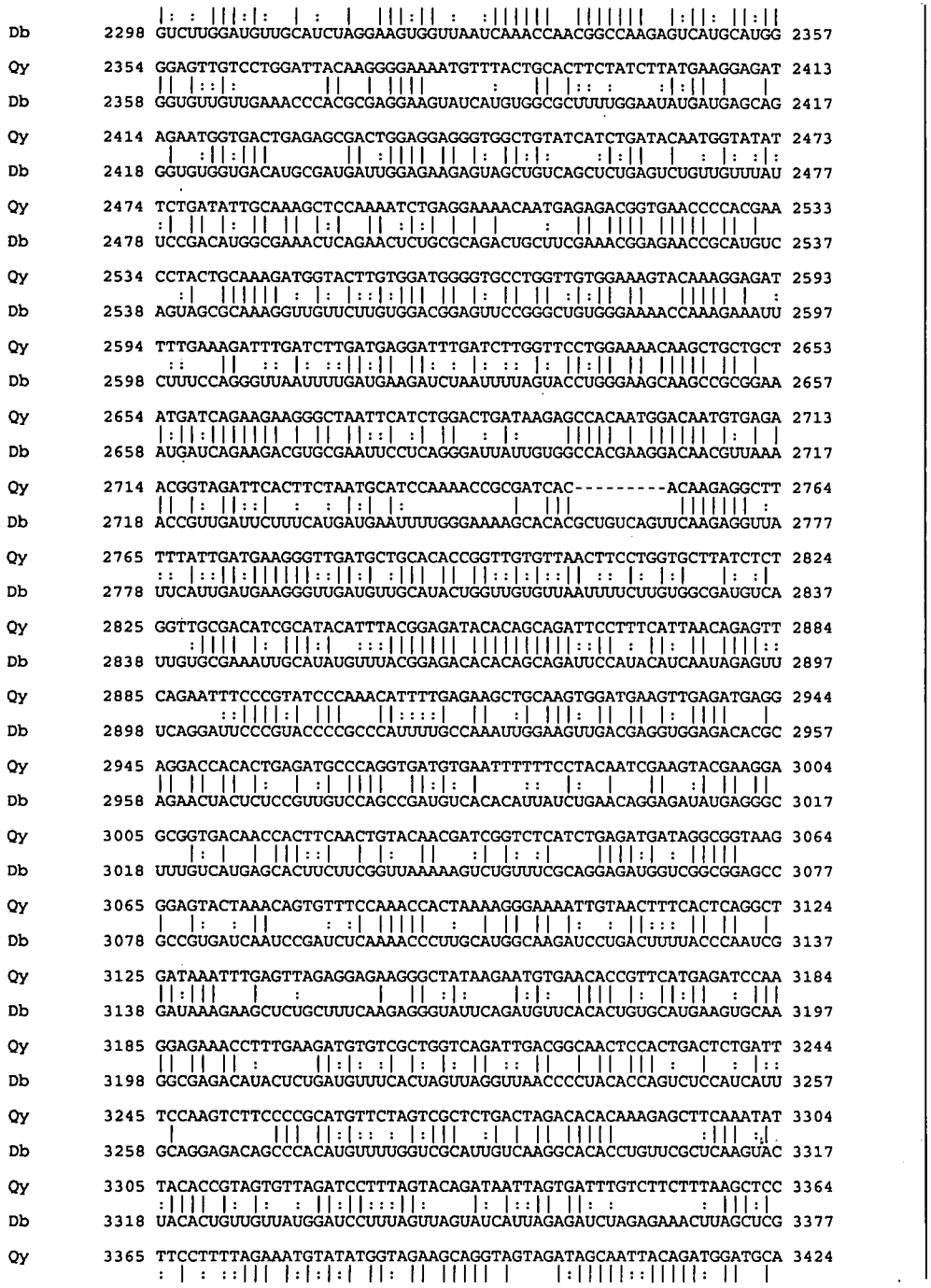
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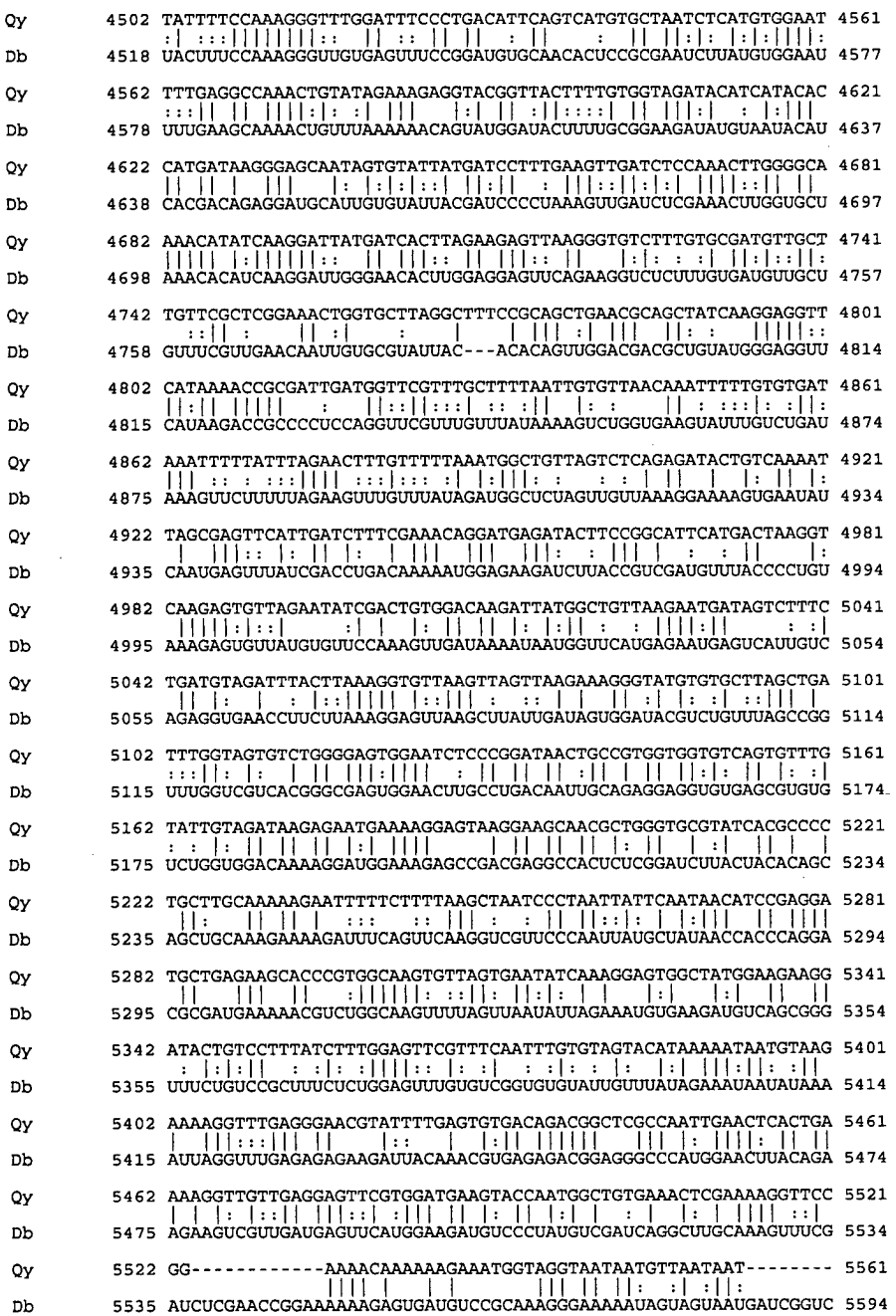

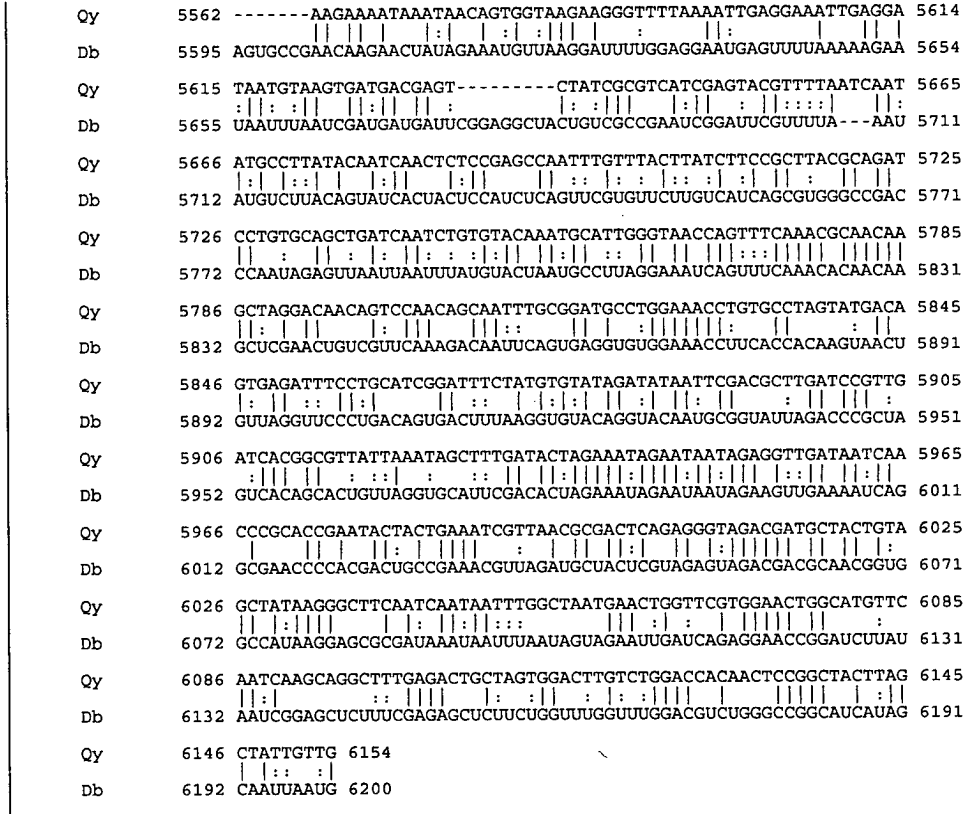

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;                   HOLTZ, R. BARRY
;                   McCULLOCH, MICHAEL
;                   TURPEN, THOMAS
;        TITLE OF INVENTION: A PROCESS FOR ISOLATING AND
;                            PURIFYING VIRUSES SOLUBLE PROTEINS AND PEPTIDES
;                            FROM PLANT SOURCES
;        NUMBER OF SEQUENCES: 5
;        CORRESPONDENCE ADDRESS:
;             ADDRESSEE: Howrey & Simon
;             STREET: 1299 Pennsylvania Avenue N.W.
;             CITY: Washington
;             STATE: DC
;             COUNTRY: USA
;             ZIP: 20004
;        COMPUTER READABLE FORM:
;             MEDIUM TYPE: Diskette
;             COMPUTER: IBM Compatible
;             OPERATING SYSTEM: DOS
;             SOFTWARE: FastSEQ for Windows Version 2.0
;        CURRENT APPLICATION DATA:
;             APPLICATION NUMBER: US/10/828,029
;             FILING DATE: 20-Apr-2004
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;       PRIOR APPLICATION DATA:
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;            FILING DATE: 24-Sep-2001
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;            FILING DATE: 10-march-1998
;       ATTORNEY/AGENT INFORMATION:
;            NAME: Halluin, Albert P
;            REGISTRATION NUMBER: 25,277
;            REFERENCE/DOCKET NUMBER: 00801.0140.999
;       TELECOMMUNICATION INFORMATION:
;            TELEPHONE: 650-463-8109
;            TELEFAX: 650-463-8400
;            TELEX: <Unknown>
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;            TYPE: nucleic acid
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;            TOPOLOGY: unknown
;       MOLECULE TYPE: Genomic RNA
;       SEQUENCE DESCRIPTION: SEQ ID NO: 5:
US-10-828-029-5

  Query Match            38.5%;  Score 2449.8;  DB 17;  Length 6446;
  Best Local Similarity  44.8%;  Pred. No. 0;
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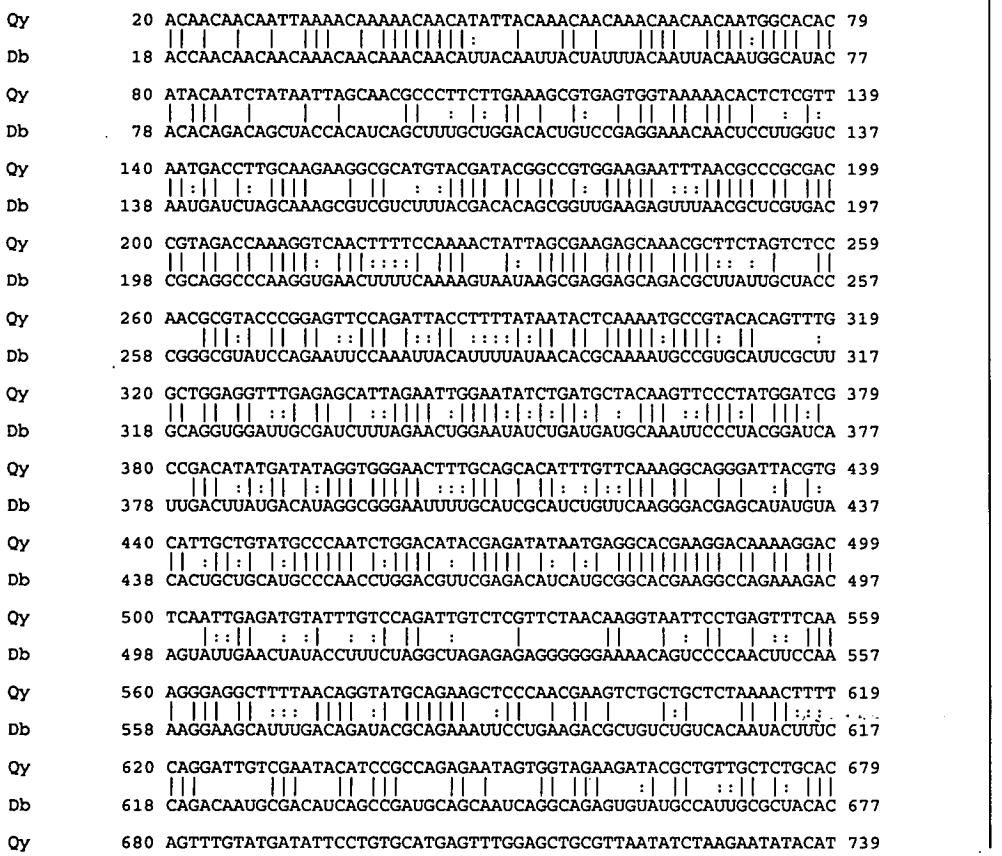

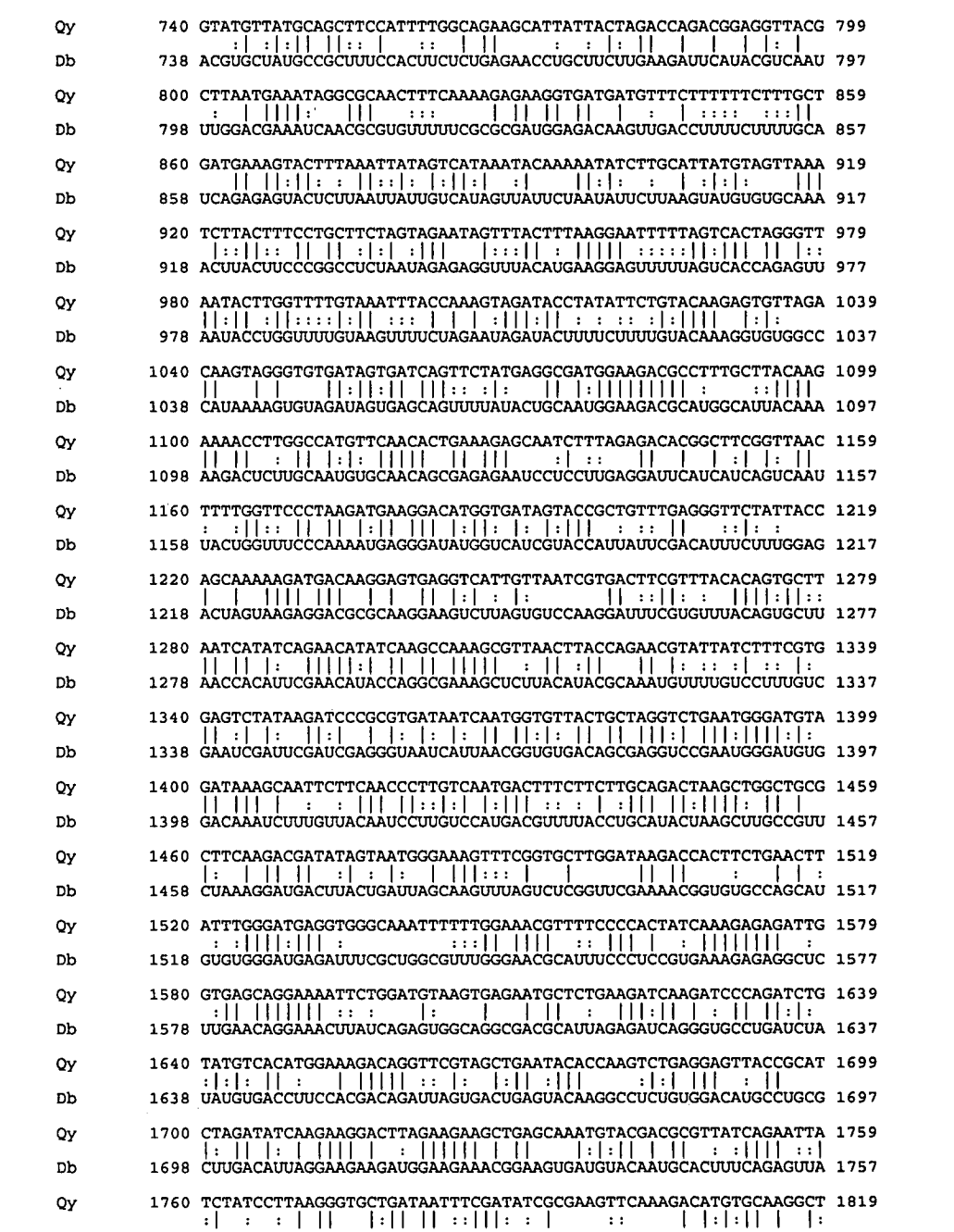

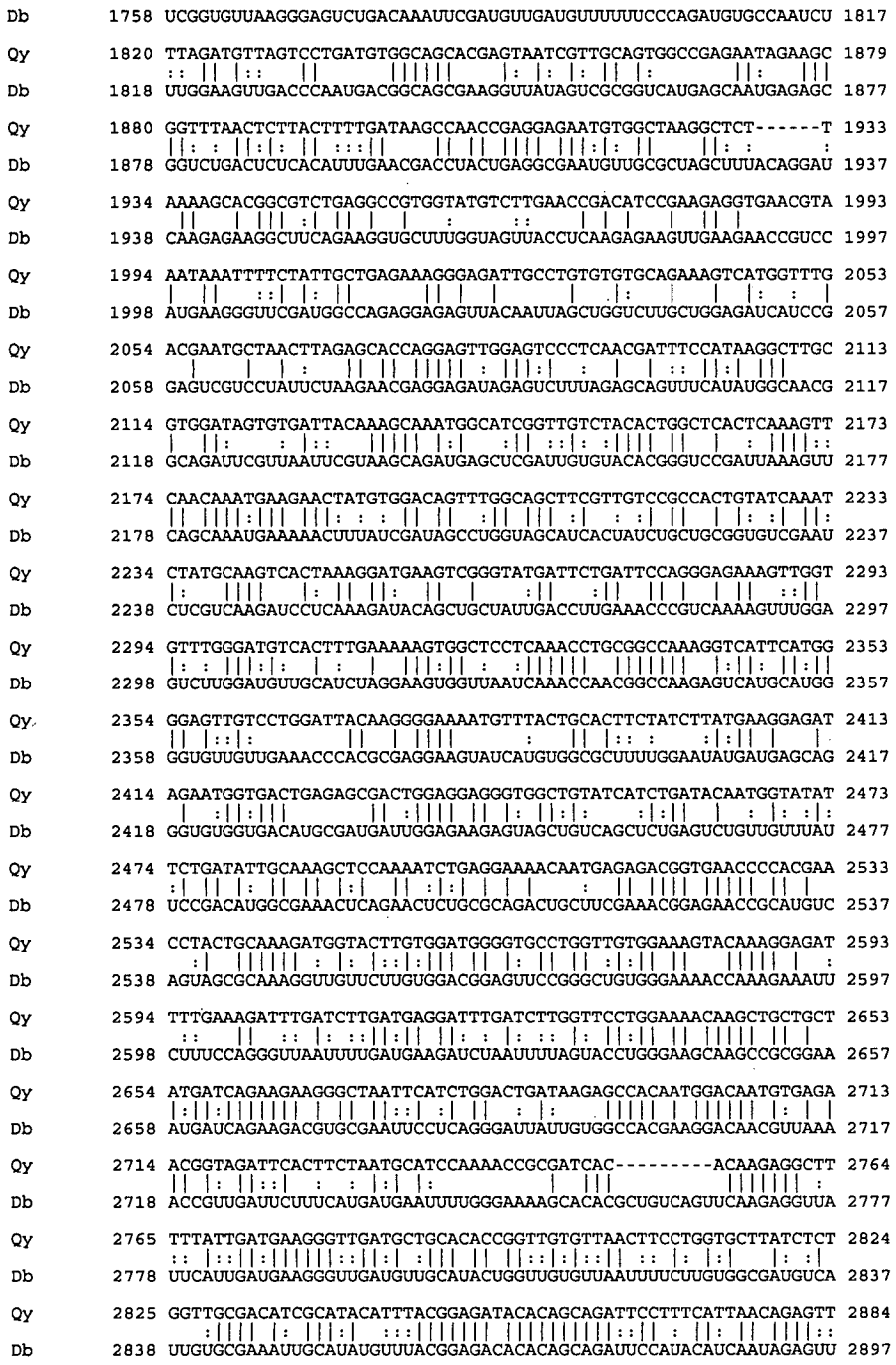
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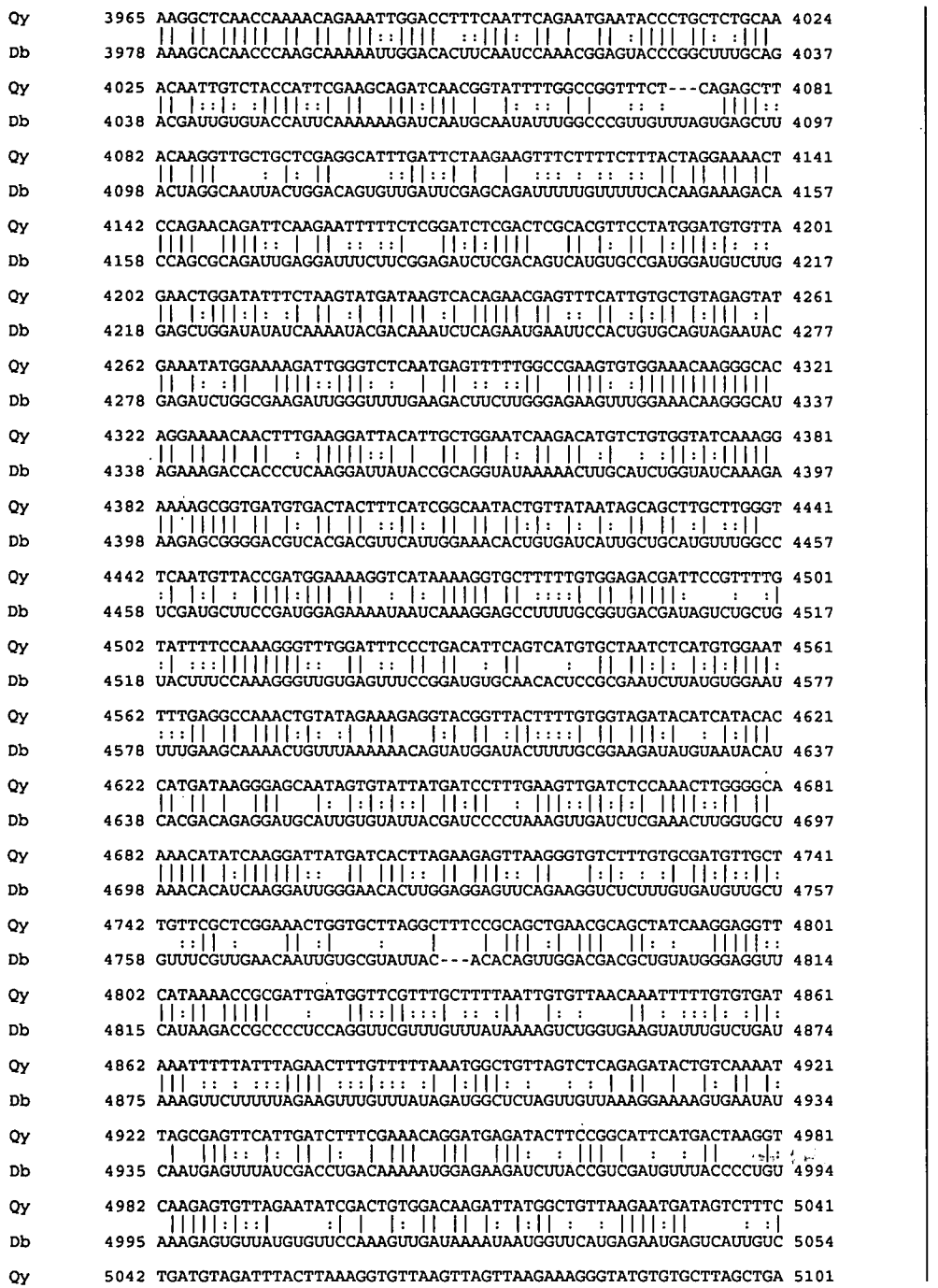
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RESULT 11
US-09-962-527-3
; Sequence 3, Application US/09962527
; Publication No. US20030049813A1
;   GENERAL INFORMATION:
;        APPLICANT: GARGER, STEPHEN
;                   HOLTZ, R. BARRY
;                   McCULLOCH, MICHAEL
;                   TURPEN, THOMAS
;        TITLE OF INVENTION: A PROCESS FOR ISOLATING AND
;                            PURIFYING VIRUSES SOLUBLE PROTEINS AND PEPTIDES
;                            FROM PLANT SOURCES
;        NUMBER OF SEQUENCES: 5
;        CORRESPONDENCE ADDRESS:
;             ADDRESSEE: Howrey & Simon
;             STREET: 1299 Pennsylvania Avenue N.W.
;             CITY: Washington
;             STATE: DC
;             COUNTRY: USA
;             ZIP: 20004
;        COMPUTER READABLE FORM:
;             MEDIUM TYPE: Diskette
;             COMPUTER: IBM Compatible
;             OPERATING SYSTEM: DOS
;             SOFTWARE: FastSEQ for Windows Version 2.0
;        CURRENT APPLICATION DATA:
;             APPLICATION NUMBER: US/09/962,527
;             FILING DATE: 24-Sep-2001
;             CLASSIFICATION: <Unknown>
;        PRIOR APPLICATION DATA:
;             APPLICATION NUMBER: 09/037,751
;             FILING DATE: 10-march-1998
;        ATTORNEY/AGENT INFORMATION:
;             NAME: Halluin, Albert P
;             REGISTRATION NUMBER: 25,277
;             REFERENCE/DOCKET NUMBER: 00801.0140.999
;        TELECOMMUNICATION INFORMATION:
;             TELEPHONE: 650-463-8109
;             TELEFAX: 650-463-8400
;             TELEX: <Unknown>
;   INFORMATION FOR SEQ ID NO: 3:
;        SEQUENCE CHARACTERISTICS:
;             LENGTH: 6425 base pairs
;             TYPE: nucleic acid
;             STRANDEDNESS: single
;             TOPOLOGY: unknown
;        MOLECULE TYPE: Genomic RNA
;        SEQUENCE DESCRIPTION: SEQ ID NO: 3:
US-09-962-527-3

  Query Match             38.3%;  Score 2431.2;  DB 10;  Length 6425;
  Best Local Similarity   44.4%;  Pred. No. 0;
  Matches 2852;  Conservative 1174;  Mismatches 2298;  Indels   96;  Gaps   12;

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Qy        140 AATGACCTTGCAAGAAGGCGCATGTACGATACGGCCGTGGAAGAATTTAACGCCCGCGAC 199
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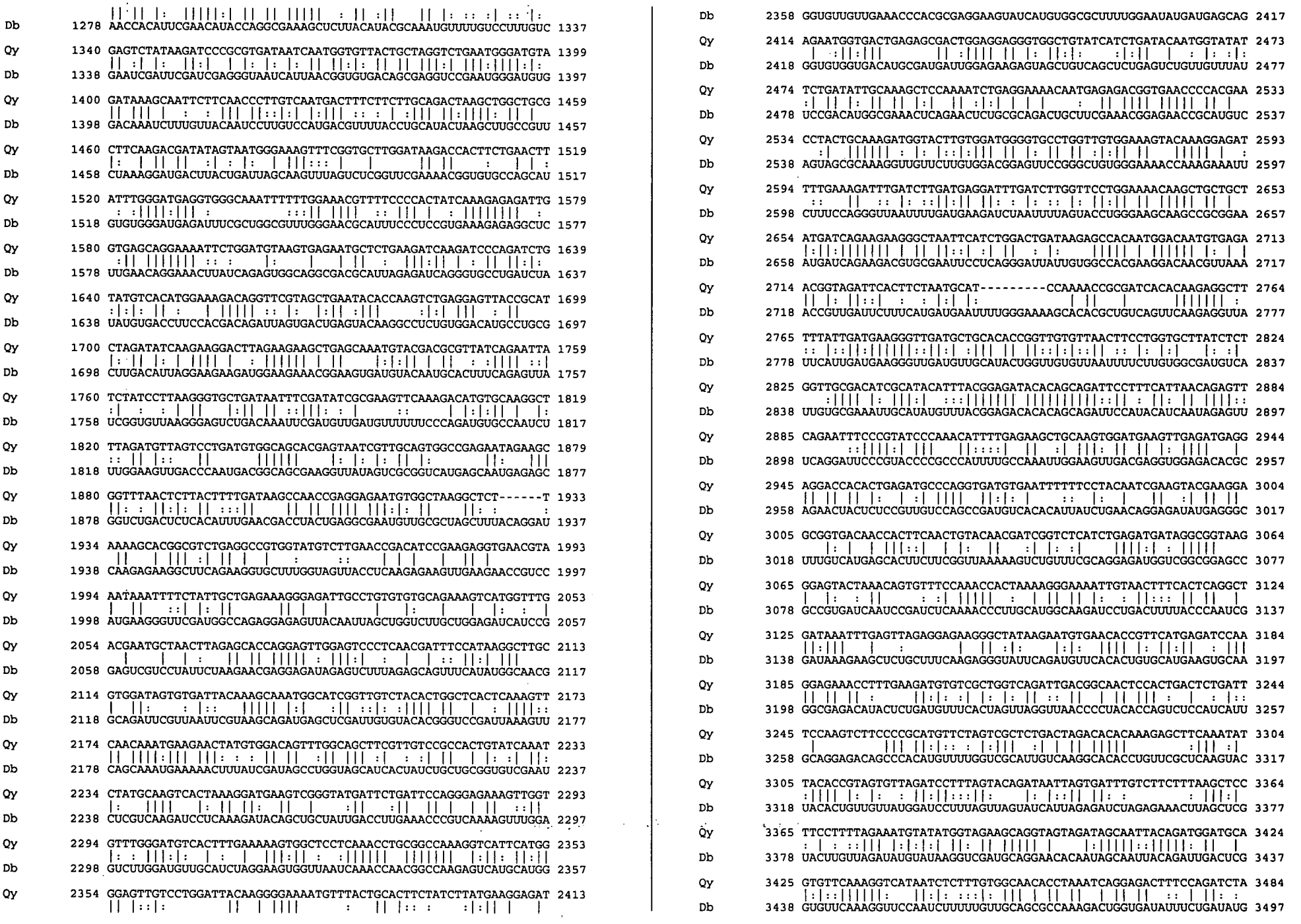
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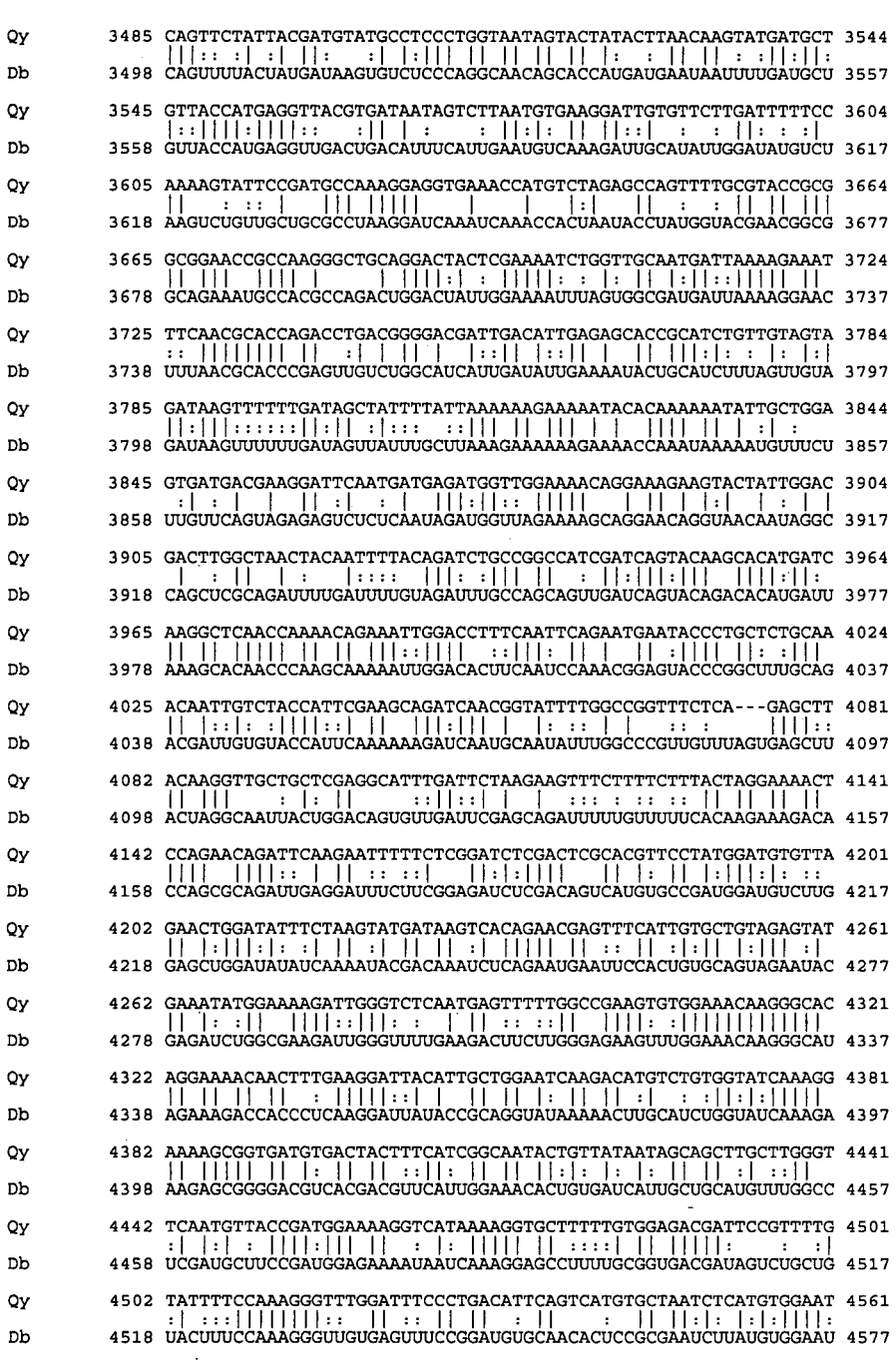
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; Publication No. US20040171813A1
;   GENERAL INFORMATION:
;        APPLICANT: GARGER, STEPHEN
;                   HOLTZ, R. BARRY
;                   McCULLOCH, MICHAEL
;                   TURPEN, THOMAS
;        TITLE OF INVENTION: A PROCESS FOR ISOLATING AND
;                            PURIFYING VIRUSES SOLUBLE PROTEINS AND PEPTIDES
;                            FROM PLANT SOURCES
;        NUMBER OF SEQUENCES: 5
;        CORRESPONDENCE ADDRESS:
;             ADDRESSEE: Howrey & Simon
;             STREET: 1299 Pennsylvania Avenue N.W.
;             CITY: Washington
;             STATE: DC
;             COUNTRY: USA
;             ZIP: 20004
;        COMPUTER READABLE FORM:
;             MEDIUM TYPE: Diskette
;             COMPUTER: IBM Compatible
;             OPERATING SYSTEM: DOS
;             SOFTWARE: FastSEQ for Windows Version 2.0
;        CURRENT APPLICATION DATA:
;             APPLICATION NUMBER: US/10/828,029
;             FILING DATE: 20-Apr-2004
;             CLASSIFICATION: <Unknown>
;        PRIOR APPLICATION DATA:
;             APPLICATION NUMBER: US/09/962,527
;             FILING DATE: 24-Sep-2001
;             APPLICATION NUMBER: 09/037,751
;             FILING DATE: 10-march-1998
;        ATTORNEY/AGENT INFORMATION:
;             NAME: Halluin, Albert P
;             REGISTRATION NUMBER: 25,277
;             REFERENCE/DOCKET NUMBER: 00801.0140.999
;        TELECOMMUNICATION INFORMATION:
;             TELEPHONE: 650-463-8109
;             TELEFAX: 650-463-8400
;             TELEX: <Unknown>
;   INFORMATION FOR SEQ ID NO: 3:
;        SEQUENCE CHARACTERISTICS:
;             LENGTH: 6425 base pairs
;             TYPE: nucleic acid
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;        SEQUENCE DESCRIPTION: SEQ ID NO: 3:
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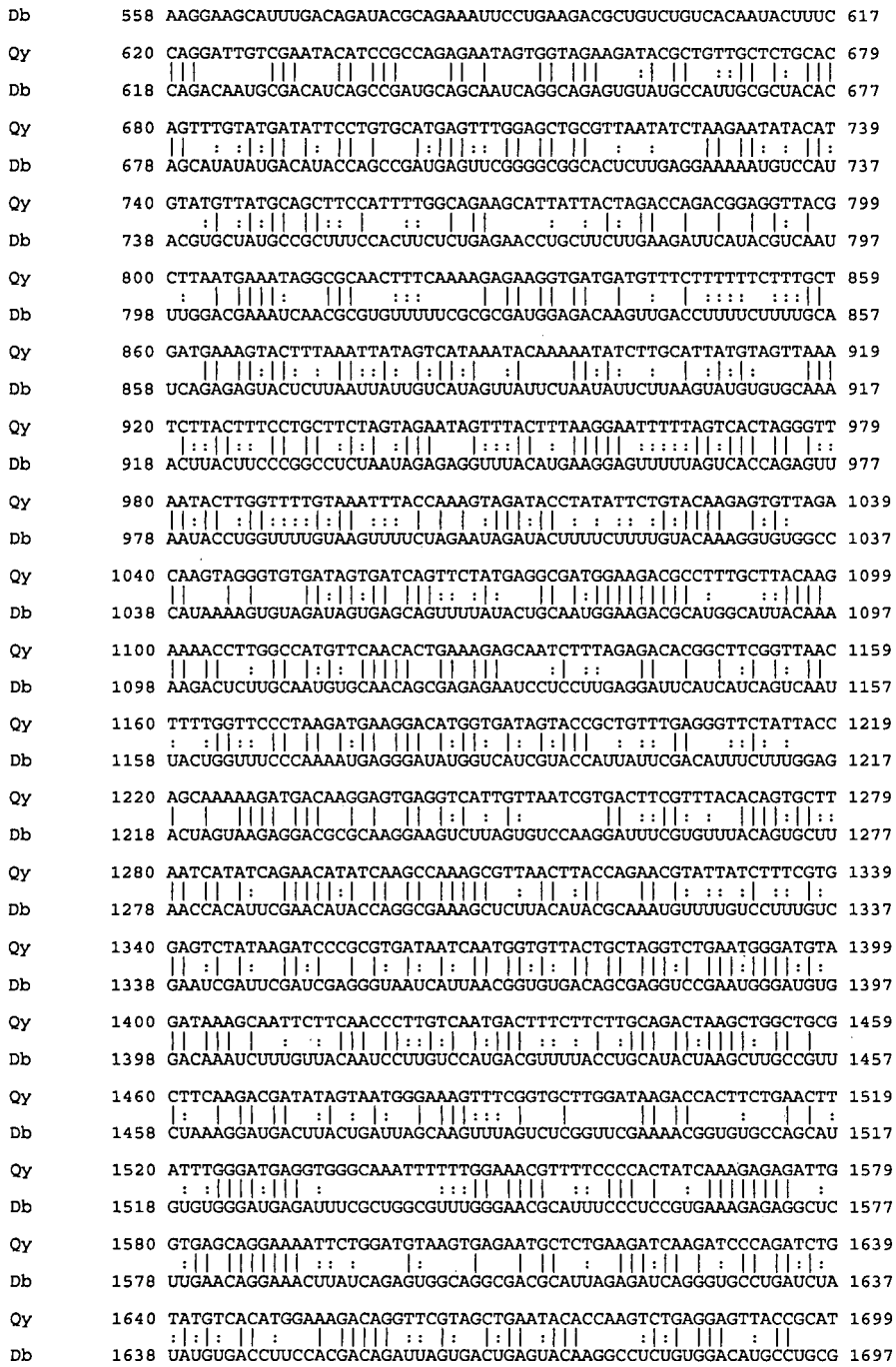
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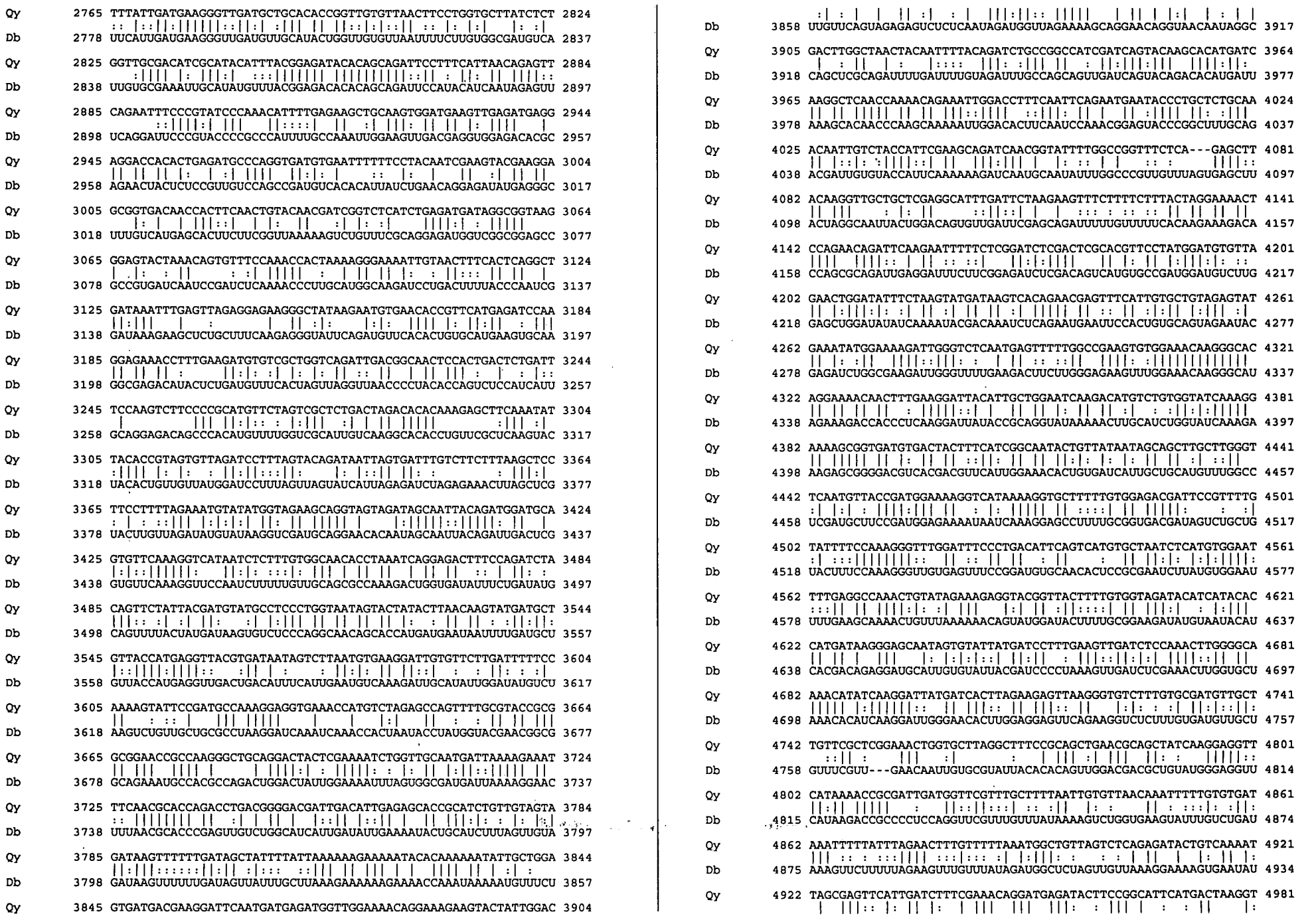

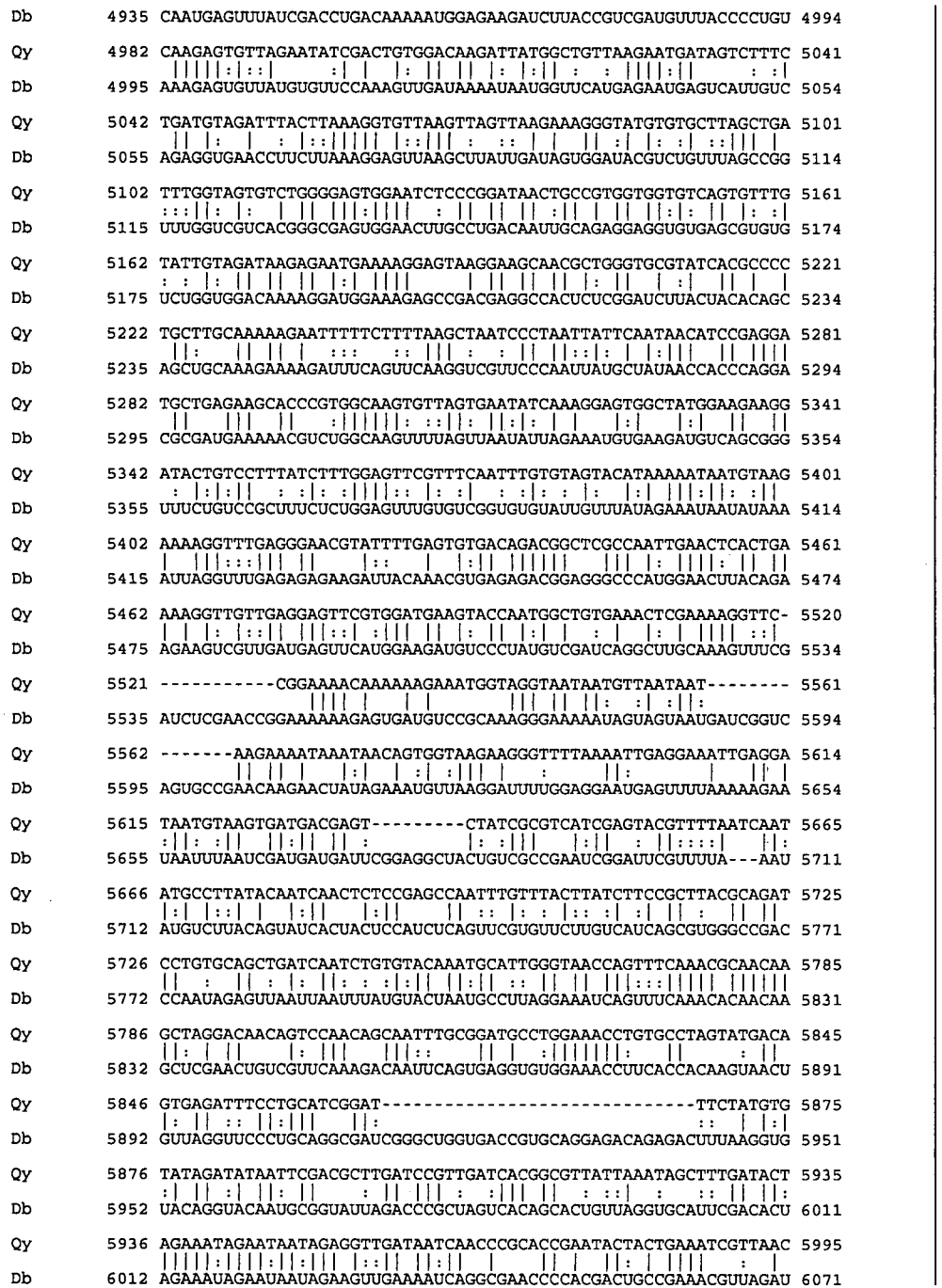

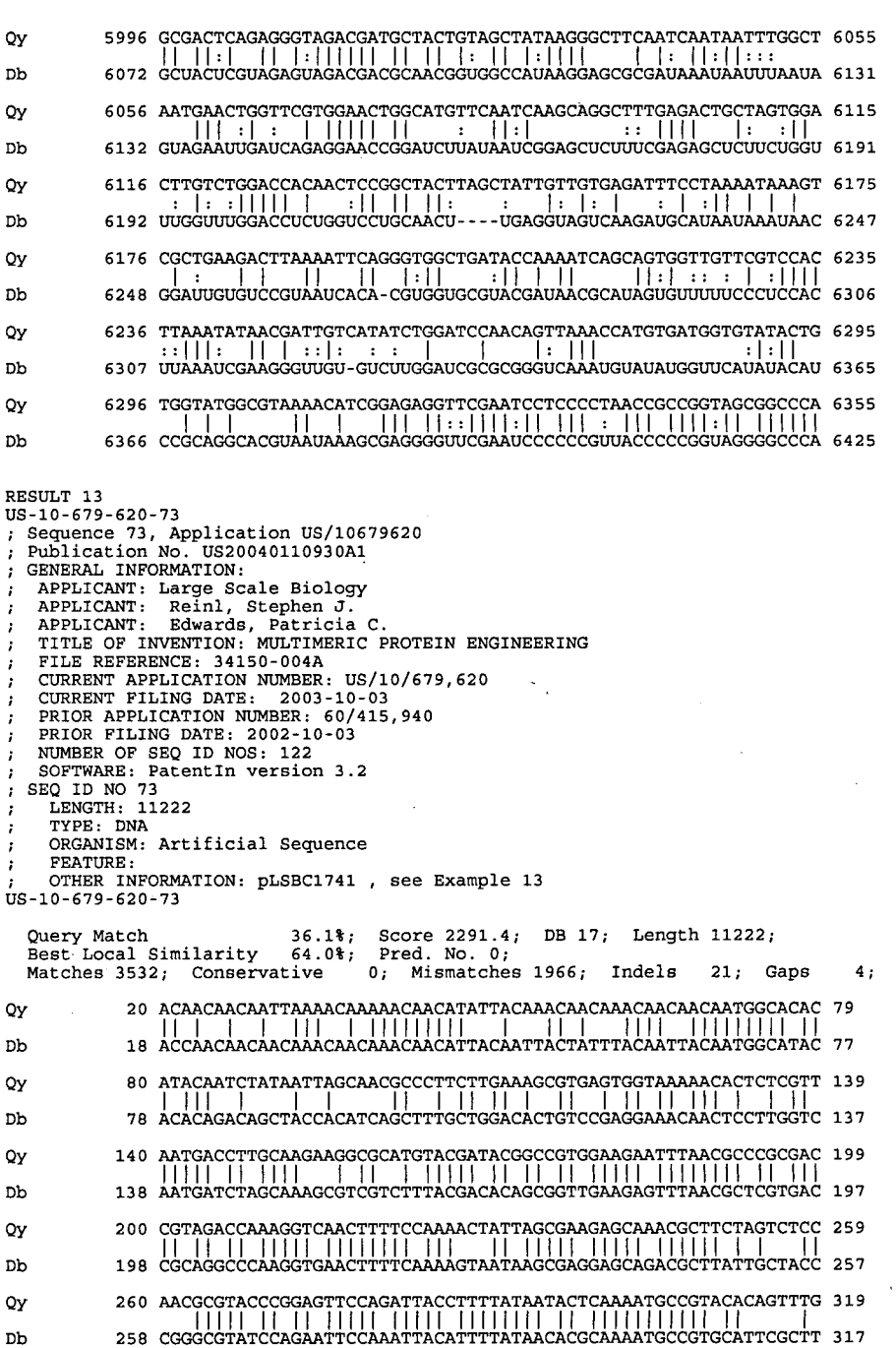

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; Sequence 73, Application US/10679620
; Publication No. US20040110930A1
; GENERAL INFORMATION:
; APPLICANT: Large Scale Biology
; APPLICANT: Reinl, Stephen J.
; APPLICANT: Edwards, Patricia C.
; TITLE OF INVENTION: MULTIMERIC PROTEIN ENGINEERING
; FILE REFERENCE: 34150-004A
; CURRENT APPLICATION NUMBER: US/10/679,620
; CURRENT FILING DATE: 2003-10-03
; PRIOR APPLICATION NUMBER: 60/415,940
; PRIOR FILING DATE: 2002-10-03
; NUMBER OF SEQ ID NOS: 122
; SOFTWARE: PatentIn version 3.2
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; ORGANISM: Artificial Sequence
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; OTHER INFORMATION: pLSBC1741 , see Example 13
US-10-679-620-73

Query Match 36.1%; Score 2291.4; DB 17; Length 11222;
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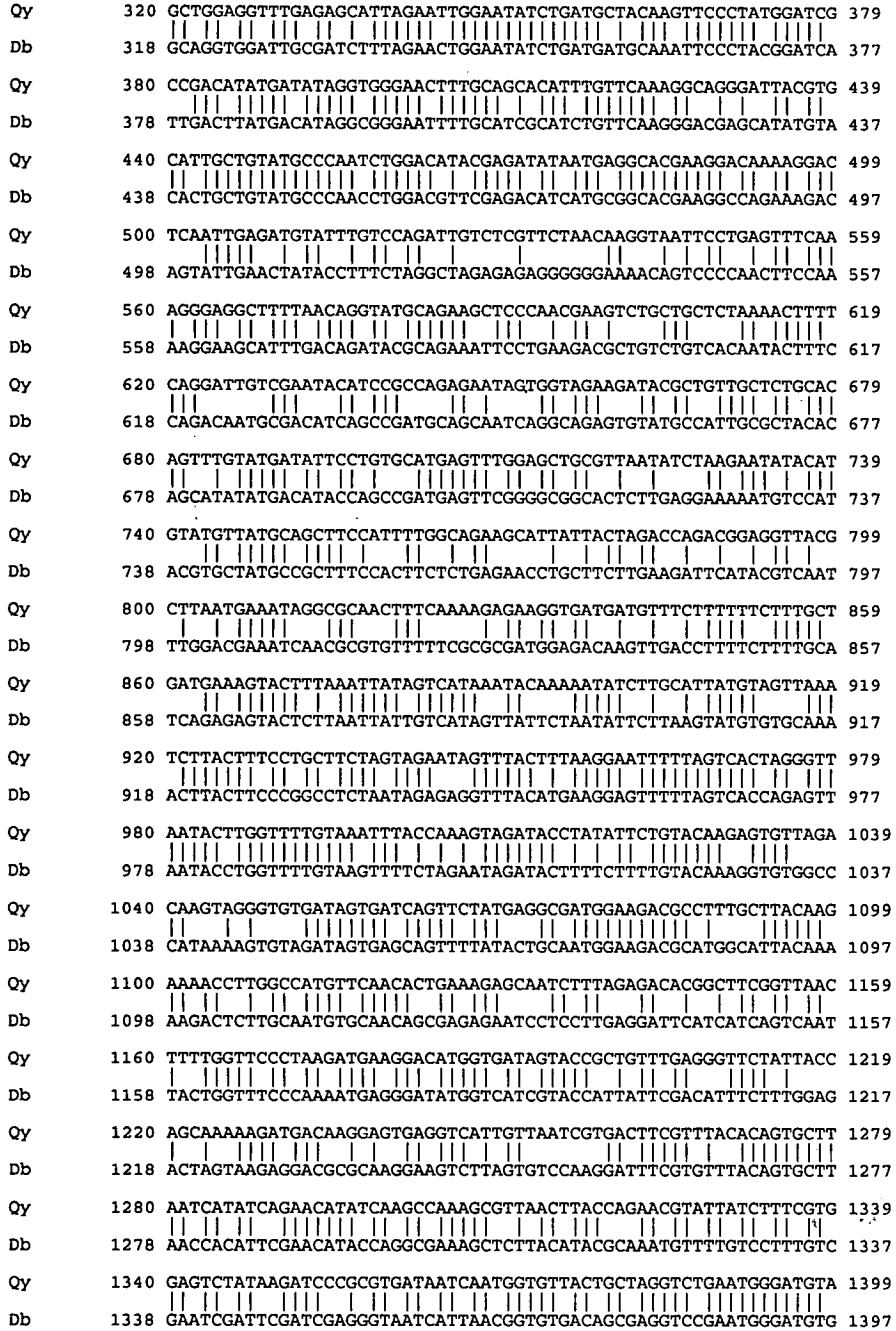

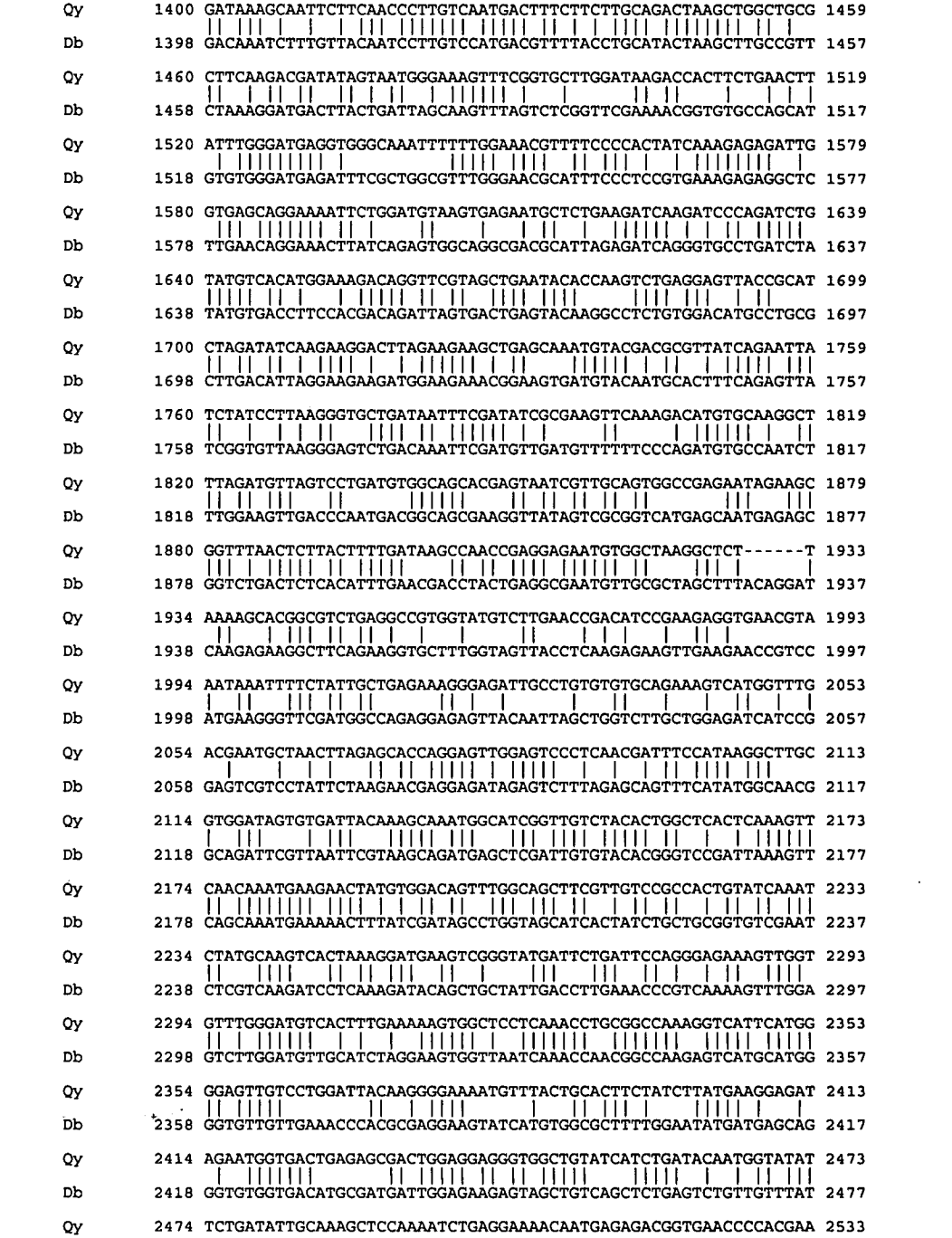

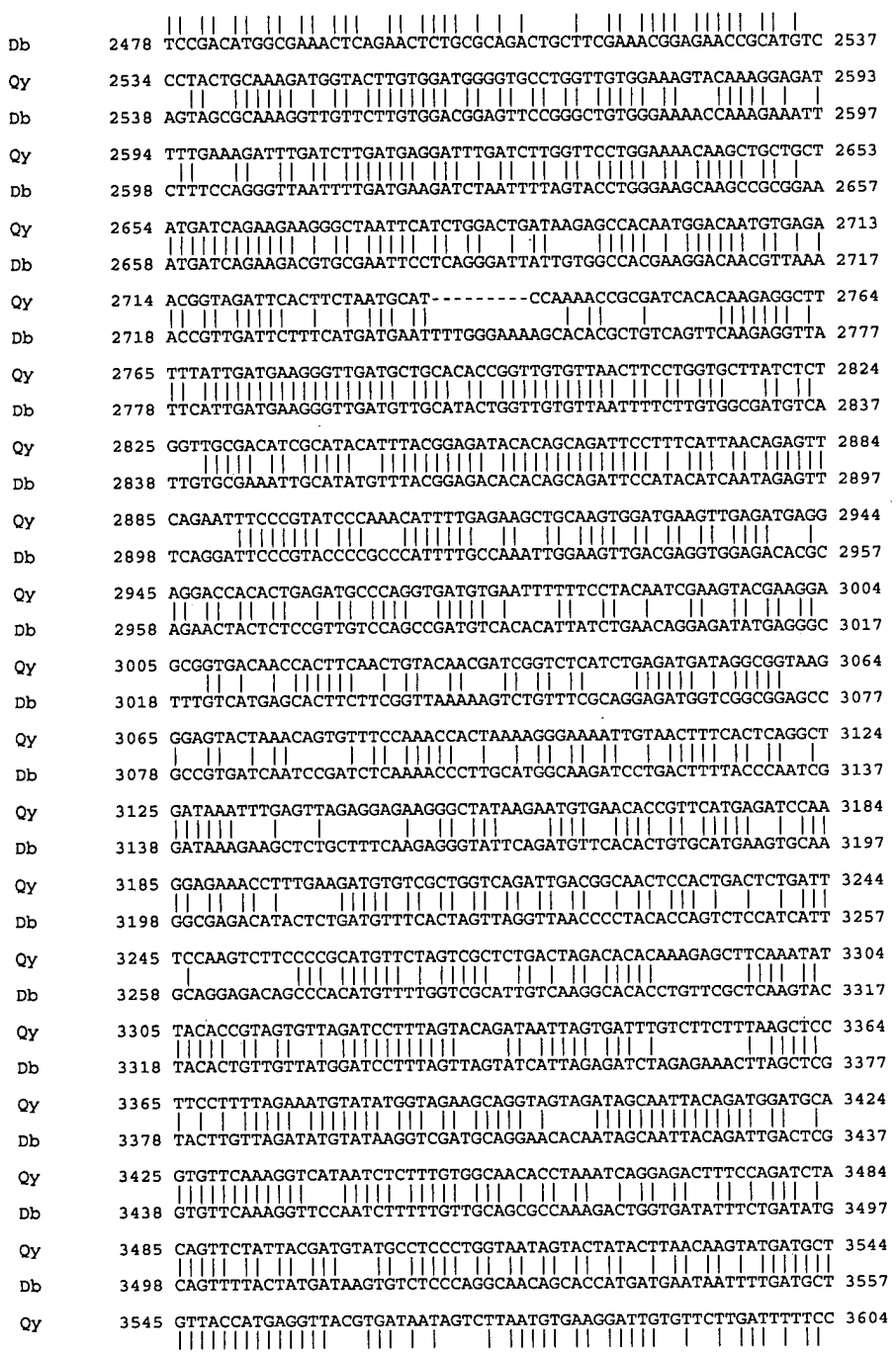
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Db 2718 ACCGTTGATTCTTTCATGATGAATTTTGGGAAAAGCACACGCTGTCAGTTCAAGAGGTTA 2777
Qy 2765 TTTATTGATGAAGGGTTGATGCTGCACACCGGTTGTGTTAACTTCCTGGTGCTTATCTCT 2824
Db 2778 TTCATTGATGAAGGGTTGATGTTGCATACTGGTTGTGTTAATTTTCTTGTGGCGATGTCA 2837
Qy 2825 GGTTGCGACATCGCATACATTTACGGAGATACACAGCAGATTCCTTTCATTAACAGAGTT 2884
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Qy 2885 CAGAATTTCCCGTATCCCAAACATTTTGAGAAGCTGCAAGTGGATGAAGTTGAGATGAGG 2944
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Qy 3065 GGAGTACTAAACAGTGTTTCCAAACCACTAAAAGGGAAAATTGTAACTTTCACTCAGGCT 3124
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Qy 3185 GGAGAAACCTTTGAAGATGTGTCGCTGGTCAGATTGACGGCAACTCCACTGACTCTGATT 3244
Db 3198 GGCGAGACATACTCTGATGTTTCACTAGTTAGGTTAACCCCTACACCAGTCTCCATCATT 3257
Qy 3245 TCCAAGTCTTCCCCGCATGTTCTAGTCGCTCTGACTAGACACACAAAGAGCTTCAAATAT 3304
Db 3258 GCAGGAGACAGCCCACATGTTTTGGTCGCATTGTCAAGGCACACCTGTTCGCTCAAGTAC 3317
Qy 3305 TACACCGTAGTGTTAGATCCTTTAGTACAGATAATTAGTGATTTGTCTTCTTTAAGCTCC 3364
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Qy 3365 TTCCTTTTAGAAATGTATATGGTAGAAGCAGGTAGTAGATAGCAATTACAGATGGATGCA 3424
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Qy 3425 GTGTTCAAAGGTCATAATCTCTTTGTGGCAACACCTAAATCAGGAGACTTTCCAGATCTA 3484
Db 3438 GTGTTCAAAGGTTCCAATCTTTTTGTTGCAGCGCCAAAGACTGGTGATATTTCTGATATG 3497
Qy 3485 CAGTTCTATTACGATGTATGCCTCCCTGGTAATAGTACTATACTTAACAAGTATGATGCT 3544
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Qy 3545 GTTACCATGAGGTTACGTGATAATAGTCTTAATGTGAAGGATTGTGTTCTTGATTTTTCC 3604
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Qy 3665 GCGGAACCGCCAAGGGCTGCAGGACTACTCGAAAATCTGGTTGCAATGATTAAAAGAAAT 3724
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Qy 3725 TTCAACGCACCAGACCTGACGGGGACGATTGACATTGAGAGCACCGCATCTGTTGTAGTA 3784
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Qy 4262 GAAATATGGAAAAGATTGGGTCTCAATGAGTTTTTGGCCGAAGTGTGGAAACAAGGGCAC 4321
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Qy 4562 TTTGAGGCCAAACTGTATAGAAAGAGGTACGGTTACTTTTGTGGTAGATACATCATACAC 4621
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Qy 4622 CATGATAAGGGAGCAATAGTGTATTATGATCCTTTGAAGTTGATCTCCAAACTTGGGGCA 4681
Db 4638 CACGACAGAGGATGCATTGTGTATTACGATCCCCTAAAGTTGATCTCGAAACTTGGTGCT 4697

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Qy       4682 AAACATATCAAGGATTATGATCACTTAGAAGAGTTAAGGGTGTCTTTGTGCGATGTTGCT 4741
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Db       4698 AAACACATCAAGGATTGGGAACACTTGGAGGAGTTCAGAAGGTCTCTTTGTGATGTTGCT 4757

Qy       4742 TGTTCGCTCGGAAACTGGTGCTTAGGCTTTCCGCAGCTGAACGCAGCTATCAAGGAGGTT 4801
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Db       4758 GTTTCGTT---GAACAATTGTGCGTATTACACACAGTTGGACGACGCTGTATGGGAGGTT 4814

Qy       4802 CATAAAACCGCGATTGATGGTTCGTTTGCTTTTAATTGTGTTAACAAATTTTTGTGTGAT 4861
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Qy       4862 AAATTTTTATTTAGAACTTTGTTTTTAAATGGCTGTTAGTCTCAGAGATACTGTCAAAAT 4921
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Qy       4922 TAGCGAGTTCATTGATCTTTCGAAACAGGATGAGATACTTCCGGCATTCATGACTAAGGT 4981
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Db       4935 CAATGAGTTTATCGACCTGACAAAAATGGAGAAGATCTTACCGTCGATGTTTACCCCTGT 4994

Qy       4982 CAAGAGTGTTAGAATATCGACTGTGGACAAGATTATGGCTGTTAAGAATGATAGTCTTTC 5041
              ||||||||||     || |  || || || || |||| |   | |||||||      | ||
Db       4995 AAAGAGTGTTATGTGTTCCAAAGTTGATAAAATAATGGTTCATGAGAATGAGTCATTGTC 5054

Qy       5042 TGATGTAGATTTACTTAAAGGTGTTAAGTTAGTTAAGAAAGGGTATGTGTGCTTAGCTGA 5101
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Db       5055 AGAGGTGAACCTTCTTAAAGGAGTTAAGCTTATTGATAGTGGATACGTCTGTTTAGCCGG 5114

Qy       5102 TTTGGTAGTGTCTGGGGAGTGGAATCTCCCGGATAACTGCCGTGGTGGTGTCAGTGTTTG 5161
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Qy       5282 TGCTGAGAAGCACCCGTGGCAAGTGTTAGTGAATATCAAAGGAGTGGCTATGGAAGAAGG 5341
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Db       5295 CGCGATGAAAAACGTCTGGCAAGTTTTAGTTAATATTAGAAATGTGAAGATGTCAGCGGG 5354

Qy       5342 ATACTGTCCTTTATCTTTGGAGTTCGTTTCAATTTGTGTAGTACATAAAAATAATGTAAG 5401
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Db       5355 TTTCTGTCCGCTTTCTCTGGAGTTTGTGTCGGTGTGTATTGTTTATAGAAATAATATAAA 5414

Qy       5402 AAAAGGTTTGAGGGAACGTATTTTGAGTGTGACAGACGGCTCGCCAATTGAACTCACTGA 5461
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Db       5415 ATTAGGTTTGAGAGAGAAGATTACAAACGTGAGAGACGGAGGGCCCATGGAACTTACAGA 5474

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RESULT 14
US-09-993-059-33
; Sequence 33, Application US/09993059
; Publication No. US20020088024A1
; GENERAL INFORMATION:
;  APPLICANT: GARGER, Stephen A.
;  APPLICANT:  TURPEN, Thomas H.
;  APPLICANT:  KUMAGAI, Monto H.
;  TITLE OF INVENTION: PRODUCTION OF LYSOSOMAL ENZYMES IN
;  TITLE OF INVENTION:  PLANTS BY TRANSIENT EXPRESSION
;  FILE REFERENCE: 008010087CPUS06
;  CURRENT APPLICATION NUMBER: US/09/993,059
;  CURRENT FILING DATE:  2001-11-13
;  NUMBER OF SEQ ID NOS: 37
;  SOFTWARE: FastSEQ for Windows Version 4.0

; SEQ ID NO 33
;   LENGTH: 11641
;   TYPE: DNA
;   ORGANISM: Tobacco mosaic virus
US-09-993-059-33

  Query Match            36.1%;  Score 2291.4;  DB 9;  Length 11641;
  Best Local Similarity  64.0%;  Pred. No. 0;
  Matches 3532;  Conservative    0;  Mismatches 1966;  Indels   21;  Gaps    4;

Qy         20 ACAACAACAATTAAAACAAAAACAACATATTACAAACAACAAACAACAACAATGGCACAC 79
              || |  |  |  |||  | |||||||||    |  || |   ||||  ||||||||| ||
Db         18 ACCAACAACAACAAACAACAAACAACATTACAATTACTATTTACAATTACAATGGCATAC 77

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Qy        140 AATGACCTTGCAAGAAGGCGCATGTACGATACGGCCGTGGAAGAATTTAACGCCCGCGAC 199
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              || || || ||||| |||||||| |||   || ||||| ||||| |||||| | |   ||
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Qy        260 AACGCGTACCCGGAGTTCCAGATTACCTTTTATAATACTCAAAATGCCGTACACAGTTTG 319
              |||||  || ||  ||||| |||||  |||||||| || ||||||||||  ||      |
Db        258 CGGGCGTATCCAGAATTCCAAATTACATTTTATAACACGCAAAATGCCGTGCATTCGCTT 317

Qy        320 GCTGGAGGTTTGAGAGCATTAGAATTGGAATATCTGATGCTACAAGTTCCCTATGGATCG 379
              || || || ||| || | |||||| |||||||||||||| | ||| |||||||  |||||
Db        318 GCAGGTGGATTGCGATCTTTAGAACTGGAATATCTGATGATGCAAATTCCCTACGGATCA 377

Qy        380 CCGACATATGATATAGGTGGGAACTTTGCAGCACATTTGTTCAAAGGCAGGGATTACGTG 439
              |||  |||||  |||||  |||||  ||||||  | |||  |||||||  ||   |  || ||
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Qy        500 TCAATTGAGATGTATTTGTCCAGATTGTCTCGTTCTAACAAGGTAATTCCTGAGTTTCAA 559
              |||||  | ||  |  |||||||  || ||  |          ||  | ||  | || |||
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Qy        620 CAGGATTGTCGAATACATCCGCCAGAGAATAGTGGTAGAAGATACGCTGTTGCTCTGCAC 679
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Db        618 CAGACAATGCGACATCAGCCGATGCAGCAATCAGGCAGAGTGTATGCCATTGCGCTACAC 677

Qy        680 AGTTTGTATGATATTCCTGTGCATGAGTTTGGAGCTGCGTTAATATCTAAGAATATACAT 739
              ||  | ||||| || || |  |||||||  || ||  ||  |    || ||| | |||
Db        678 AGCATATATGACATACCAGCCGATGAGTTCGGGGCGGCACTCTTGAGGAAAAATGTCCAT 737

Qy        740 GTATGTTATGCAGCTTCCATTTTGGCAGAAGCATTATTACTAGACCAGACGGAGGTTACG 799
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Db        738 ACGTGCTATGCCGCTTTCCACTTCTCTGAGAACCTGCTTCTTGAAGATTCATACGTCAAT 797

Qy        800 CTTAATGAAATAGGCGCAACTTTCAAAAGAGAAGGTGATGATGTTTCTTTTTTCTTTGCT 859
              |  |:|||||   |||  |||     | || || ||  |  |  | ||||  |||||
Db        798 TTGGACGAAATCAACGCGTGTTTTTCGCGCGATGGAGACAAGTTGACCTTTTCTTTTGCA 857

Qy        860 GATGAAAGTACTTTAAATTATAGTCATAAATACAAAAATATCTTGCATTATGTAGTTAAA 919
              || |||||| | |||||| ||||||  ||    |||||  |  | |||||     |||
Db        858 TCAGAGAGTACTCTTAATTATTGTCATAGTTATTCTAATATTCTTAAGTATGTGTGCAAA 917

Qy        920 TCTTACTTTCCTGCTTCTAGTAGAATAGTTTACTTTAAGGAATTTTTAGTCACTAGGGTT 979
              |||||||  || || |||| ||||   ||||||  | |||||  |||||||||| || |||
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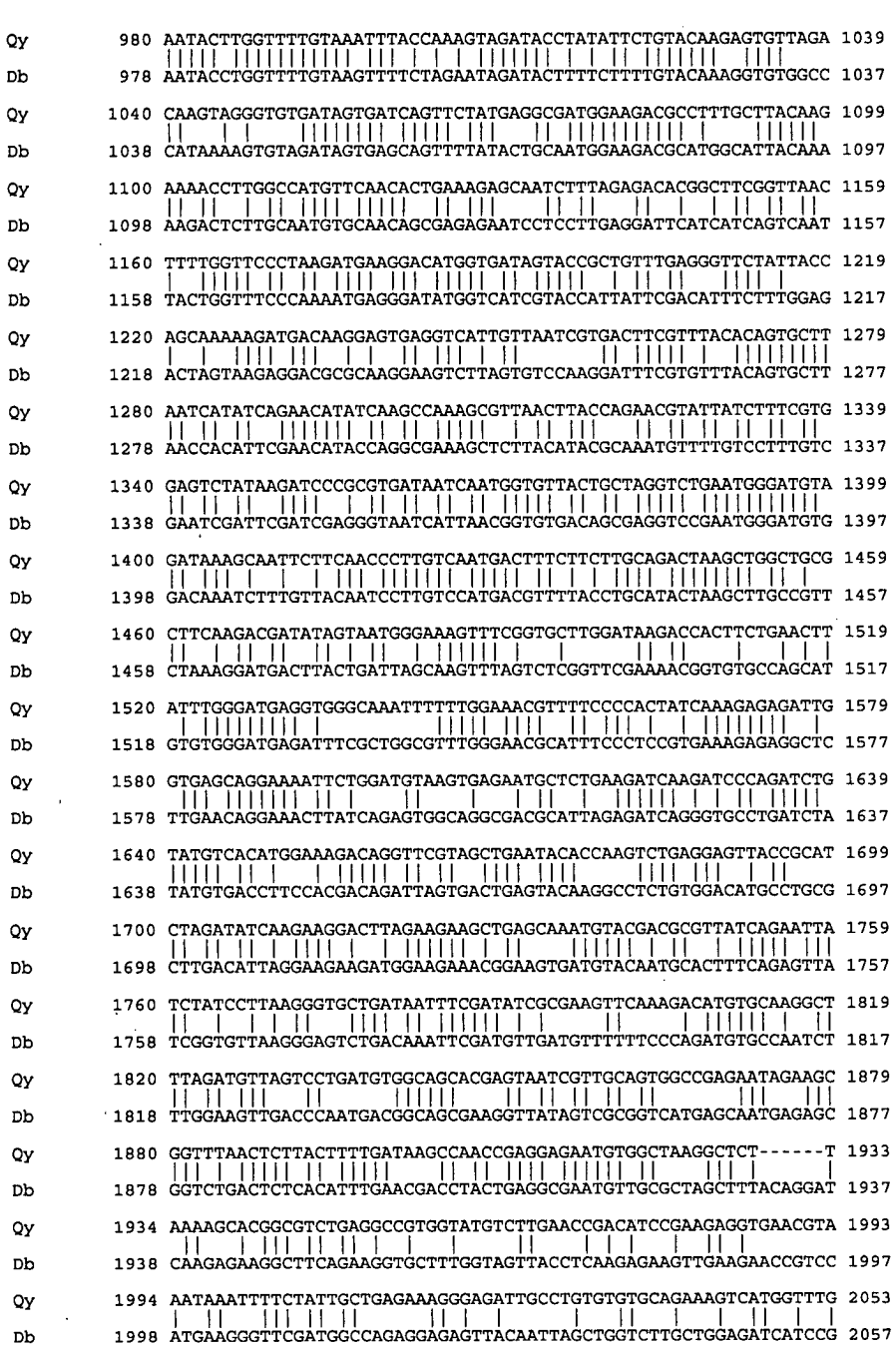
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Db 978 AATACCTGGTTTTGTAAGTTTTCTAGAATAGATACTTTTCTTTTGTACAAAGGTGTGGCC 1037
Qy 1040 CAAGTAGGGTGTGATAGTGATCAGTTCTATGAGGCGATGGAAGACGCCTTTGCTTACAAG 1099
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Qy 1100 AAAACCTTGGCCATGTTCAACACTGAAAGAGCAATCTTTAGAGACACGGCTTCGGTTAAC 1159
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Qy 1160 TTTTGGTTCCCTAAGATGAAGGACATGGTGATAGTACCGCTGTTTGAGGGTTCTATTACC 1219
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Qy 1994 AATAAATTTTCTATTGCTGAGAAAGGGAGATTGCCTGTGTGTGCAGAAAGTCATGGTTTG 2053
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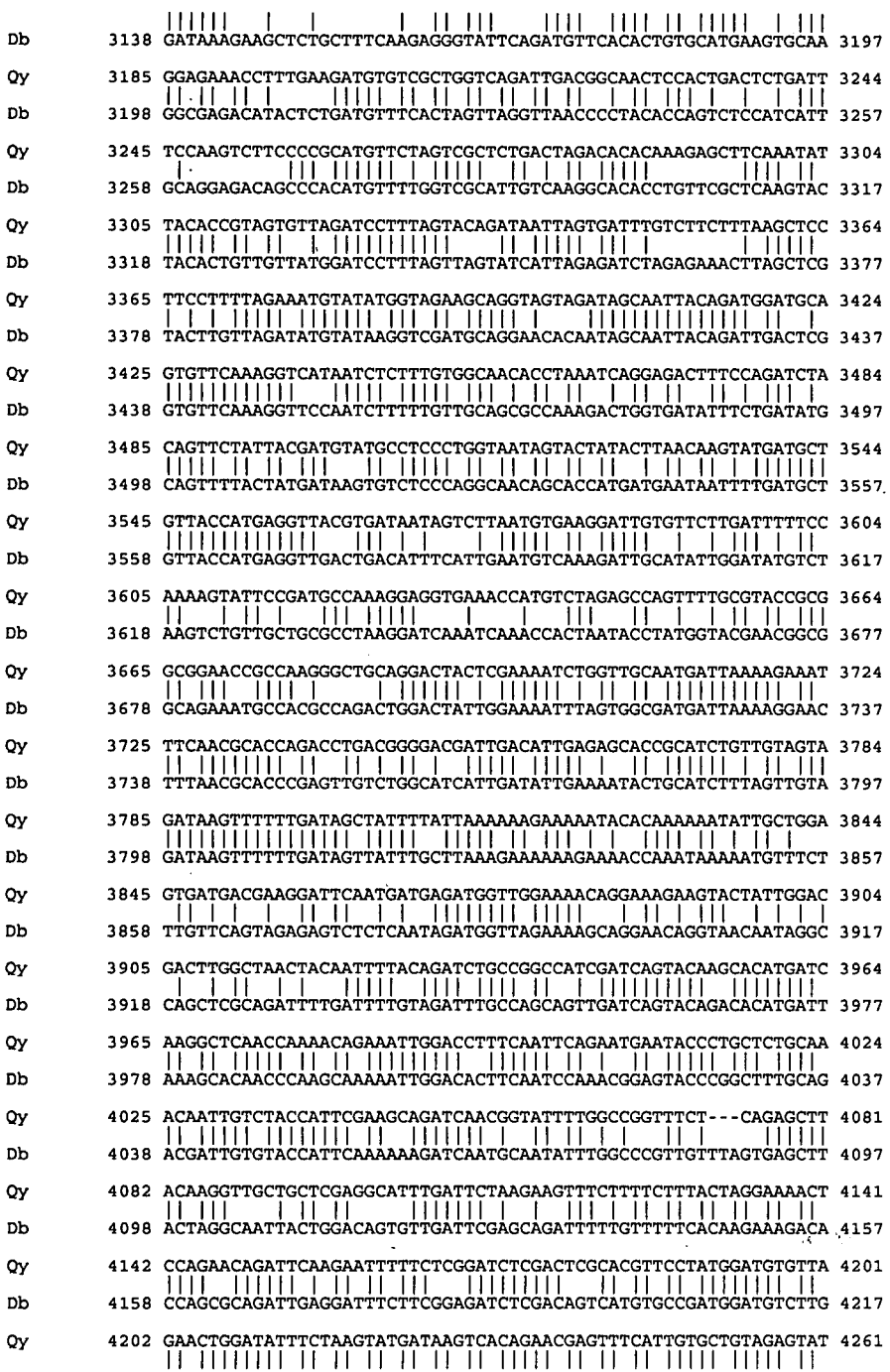
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RESULT 15
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; Sequence 33, Application US/10103327
; Publication No. US20030106095A1
; GENERAL INFORMATION:
; APPLICANT: GARGER, Stephen A.
; APPLICANT: TURPEN, Thomas H.
; APPLICANT: KUMAGAI, Monto H.
; TITLE OF INVENTION: PRODUCTION OF LYSOSOMAL ENZYMES IN
; TITLE OF INVENTION: PLANTS BY TRANSIENT EXPRESSION
; FILE REFERENCE: 008010087CPUS06
; CURRENT APPLICATION NUMBER: US/10/103,327
; CURRENT FILING DATE: 2002-03-20
; PRIOR APPLICATION NUMBER: US/09/993,059
; PRIOR FILING DATE: 2001-11-13
; NUMBER OF SEQ ID NOS: 37
; SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 33
; LENGTH: 11641
; TYPE: DNA
; ORGANISM: Tobacco mosaic virus
US-10-103-327-33

Query Match 36.1%; Score 2291.4; DB 15; Length 11641;
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              || ||  | || |||| |||||  || |||    || ||   ||  |  | || || ||
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Db       1278 AACCACATTCGAACATACCAGGCGAAAGCTCTTACATACGCAAATGTTTTGTCCTTTGTC 1337

Qy       1340 GAGTCTATAAGATCCCGCGTGATAATCAATGGTGTTACTGCTAGGTCTGAATGGGATGTA 1399
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Db       1398 GACAAATCTTTGTTACAATCCTTGTCCATGACGTTTTACCTGCATACTAAGCTTGCCGTT 1457

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Db       1518 GTGTGGGATGAGATTTCGCTGGCGTTTGGGAACGCATTTCCCTCCGTGAAAGAGAGGCTC 1577

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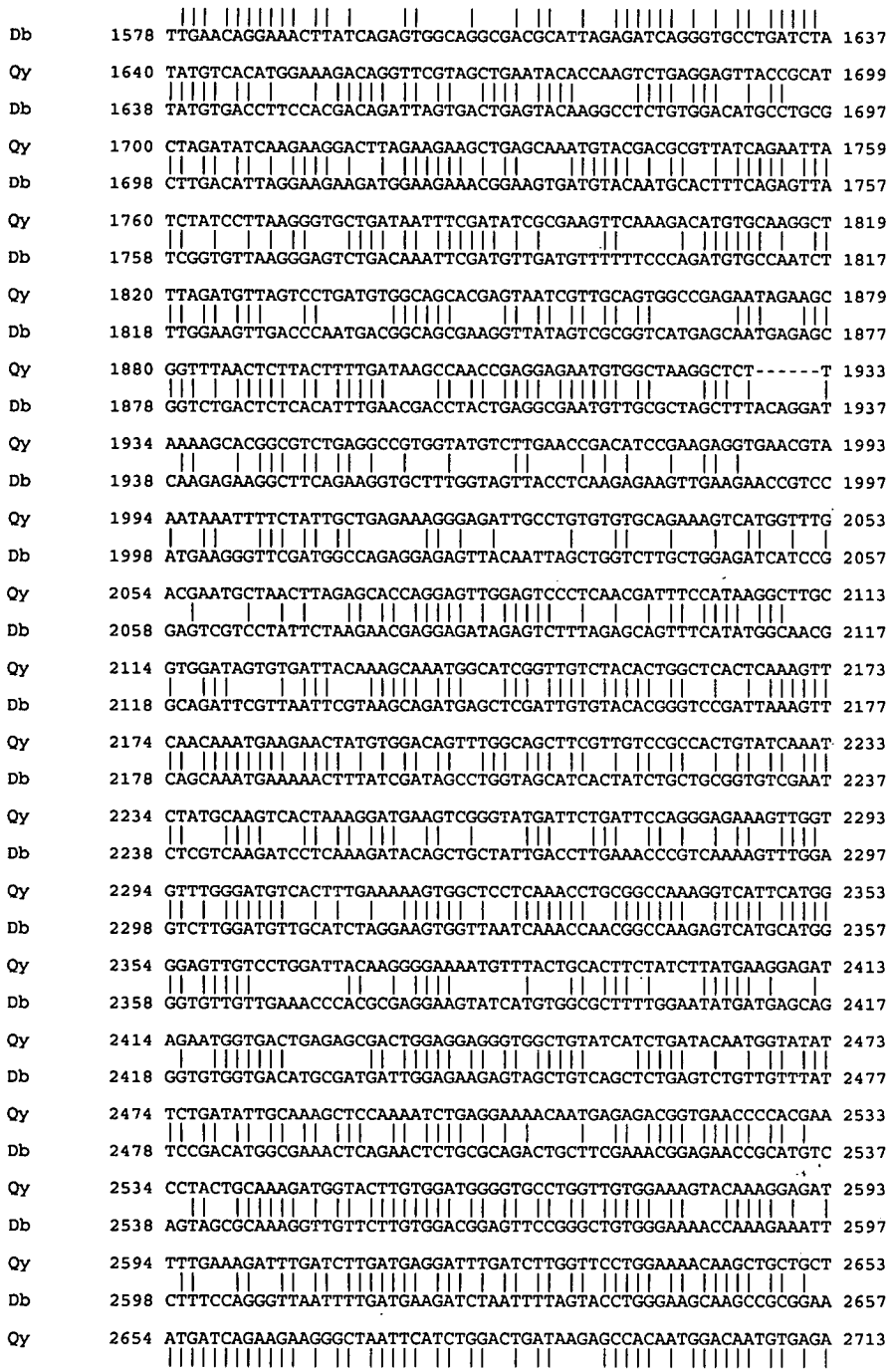
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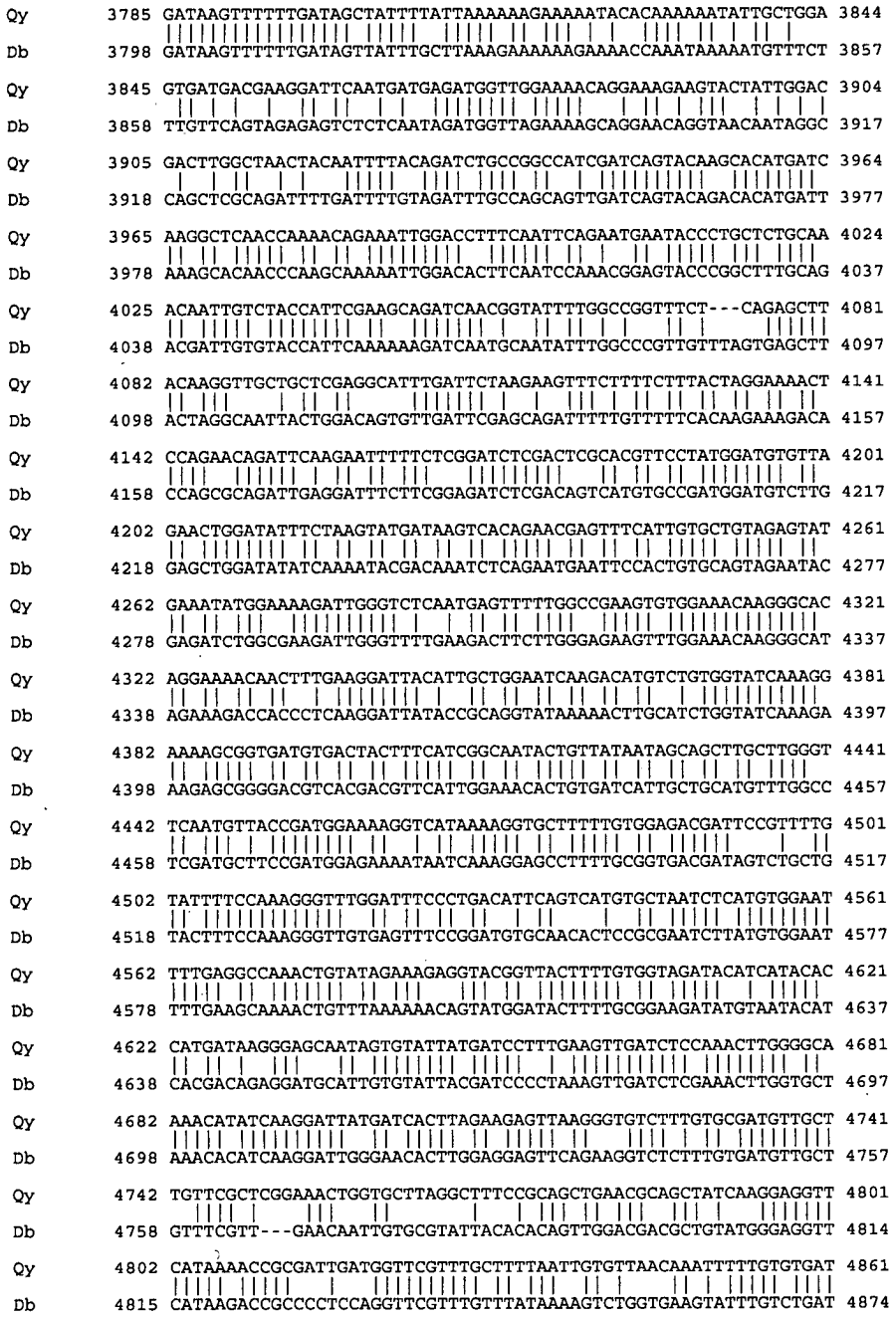

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